UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

September 18, 2003

Douglas M. Finch, Program Manager
Cimarron Corporation
Kerr-McGee Center
P.O. Box 25861
Oklahoma City, Oklahoma 73125

SUBJECT: NRC INSPECTION REPORT 070-00925/03-001

Dear Mr. Finch:

An NRC inspection was conducted on June 24-27, 2003, at your Cimarron site near Crescent, Oklahoma, of activities authorized by NRC Special Nuclear Materials License SNM-928. On September 11, 2003, following our receipt and evaluation of water sample results from your contract laboratory, the lead inspector conducted a telephonic exit briefing with the manager, planning and regulatory compliance, project manager. The enclosed report presents the scope and results of that inspection.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a review of your organization and management, radiation protection, solid radioactive waste management, transportation of radioactive materials, environmental protection, and corrective actions on a previously identified violation. In addition, groundwater and surface water samples were collected for analysis.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, please contact D. Blair Spitzberg, Ph.D. at (817) 860-8191 or Emilio M. Garcia at (530) 756-3910.

Sincerely,

D. Blair Spitzberg, Ph.D., Chief
Fuel Cycle and Decommissioning Branch

Docket No.: 070-00925
License No.: SNM-928

Enclosure:
NRC Inspection Report
070-00925/03-001

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ENCLOSURE

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	070-00925
License No.:	SNM-928
Report No.:	070-00925/03-001
Licensee:	Cimarron Corporation Kerr-McGee Center Oklahoma City, Oklahoma 73125
Facility:	Cimarron Site
Location:	Crescent, Oklahoma
Dates:	June 24 through September 11, 2003
Inspectors:	Emilio M. Garcia, Health Physicist R. Rick Muñoz, Health Physicist
Accompanied By:	Kenneth M. Kalman, Project Manager, DWM NMSS Jon M. Peckenpaugh, Groundwater Hydrologist, DWM NMSS Gary W. Purdy, Health Physicist, DWM NMSS
Approved By:	D. Blair Spitzberg, Ph.D., Chief Fuel Cycle & Decommissioning Branch
Attachment:	Supplemental Information

EXECUTIVE SUMMARY

Cimarron Corporation
NRC Inspection Report 070-00925/03-001

The Cimarron Corporation has been conducting site remediation activities in preparation for the termination of Special Nuclear Materials License SNM-928. Decommissioning inspections and radiological surveys had been conducted by the NRC at the Cimarron Site as part of the overall confirmatory survey process. This inspection was a continuation of that process. This inspection included reviewing organization and management, radiation protection, solid radioactive waste management, transportation of radioactive materials, and environmental protection. The inspection also involved collecting water samples from groundwater wells and from surface waters.

Radiation Protection

- Radiation survey instruments used were operable and within their calibration interval (Section 1).
- No occupational exposure was received in 2002 or the first quarter of 2003 (Section 1).
- Radioactive sources were stored in a locked and properly labeled cabinet (Section 1).
- The As Low As Reasonably Achievable (ALARA) Committee had met quarterly through the first quarter of 2003, with one additional Special ALARA Committee meeting on June 26, 2002 (Section 1).
- All removable contamination surveys reviewed were less than the minimum detectable activity (MDA) (Section 1).
- Appropriate training has been presented to all affected individuals (Section 1).
- The licensee had adequately implemented the health physics program (Section 1).

Radioactive Waste Management and Waste Generator Requirements and Transportation Activities

- There has been no offsite, nor onsite disposal of decommissioning wastes, nor shipments of radioactive waste since the last inspection (Section 2).
- Approximately 200 pounds of monitor well sediment and soil waste is temporarily being stored in the uranium building awaiting offsite disposal to an authorized receiving facility (Section 2).
- The licensee had effectively implemented the license requirements related to the management and shipment of radioactive waste (Section 2).

Management Organization and Controls

- The inspectors concluded that the revised organizational reporting chain did not cause a degradation in safety or environmental commitments addressed in the NRC approved Cimarron Radiation Protection Plan nor the Decommissioning Plan (Section 3.1).

- Radiation protection procedures were reviewed and approved by the radiation safety officer (Section 3.2).

- The inspectors concluded that audit and surveillances were being effectively and objectively implemented (Section 3.3).

- The Cimarron ALARA Committee membership met the requirements of License Condition 27(e).3 (Section 3.4).

Environmental Protection

- The licensee had procedures and practices in place to implement the environmental protection program at the site. All environmental samples were taken as required by the licensee (Section 4).

Closeout Inspection and Survey

- The groundwater analytical result from five well locations exceeded the applicable release criteria of 180 pCi/l for total uranium. These samples were collected from wells located on a known groundwater plume (Section 5).

- All measurement results for Tc-99, but one, were below 3,790 pCi/l. The one exception was at Seep 1208 as measured by the licensee's contract laboratory (Section 5).

Follow-up

- The NRC regional and headquarters cognizant staff concluded that the lack of agreement in the Tc-99 analysis results between the licensee's and NRC's contract laboratories was not due to sampling nor analytical methods employed by the licensee's contractor laboratories. This item is considered closed (Section 6).

Report Details

1 Radiation Protection (83822, 88104)

1.1 Inspection Scope

The inspectors interviewed individuals regarding the implementation of their health physics program, reviewed applicable records, and observed the storage of radioactive materials.

1.2 Observations and Findings

The licensee had submitted their revised radiation protection plan to NRC for review and approval. The NRC accepted the revised plan on April 17, 2000.

a. Survey Instruments

The inspectors selected four portable instruments and one stationary radiation survey instrument used by the licensee to determine if they were operable and within their calibration frequency. The instruments were operable, had charged batteries, responded to radiation and were within the calibration interval. The licensee has their portable instruments on a 6-month calibration interval and annual for the Tennelec LB 5100 used in the laboratory. Some instruments were calibrated onsite and some were shipped offsite for calibrations.

b. Personnel Monitoring

The inspectors reviewed the exposure reports through the first quarter of 2003, submitted by the external dosimetry supplier, United States Dosimetry Tech Inc., selected licensee reports and internal memorandums related to external dosimetry.

The external dosimetry supplier was accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). The licensee used thermoluminescence dosimeters (TLDs) as the primary means of determining the dose of record. No occupational dose was reported as having been received for any of the quarters reviewed. A review of NRC Forms 4 and 5 for all monitored individuals indicated the forms were completed accurately. These forms were reviewed through April 2003. Only two personnel devices were permanently assigned. The rest were issued as visitor badges and assigned on a quarterly basis. A total of 24 visitor badges was reviewed for the period covered. Administrative limits were set at 100 milliRem (mRem) for individuals and 200 mRem for the collective dose. Visitors were no longer given a temporary TLD, but the licensee wished to keep that option open in the event a potential for exposure may exist for special circumstances during decommissioning. Doses for the year were 0 mRem for individuals and for the collective dose. The licensee's as low as reasonably achievable (ALARA) goals were met.

c. Radiation Work Permits

The licensee issues special work permits (SWP) for work where the potential for significant exposure to radioactive materials exists and for which no standard operating procedure (SOP) exists. Special work permits used by the licensee contain the details of the job to be performed, any precautions necessary to reduce exposure and radiological monitoring and sampling required before, during, and following completion of the job. The radiation safety officer (RSO) indicates, by signature, the review of each SWP prior to the initiation of the work. The work appears to be carried out in adherence to the conditions of the SWPs. An internal audit conducted April 29 through May 1, 2003, identified that the drilling of wells surrounding Seep 1206 was performed without an active SWP. Section 9.1 of Annex A of the Radiation Protection Plan requires that a SWP be developed whenever work with potentially hazardous or radioactive material is performed. It was determined that Seep 1206 was inadvertently omitted from the title of SWP 3024. The SWP was written for all new cell installations on the site. Seep 1206 was added to the current SWP 3024, Revision 0. Training was verified on all SWPs. Each work permit included a signed and dated sheet by all parties involved and initialed by the health physics (HP) technician or site manager. The inspectors did not identify any problems with the SWP program and SWPs issued.

d. Radiation Protection Program

The inspectors reviewed selected records of the revised radiation protection plan dated April 23, 2001. The ALARA Committee maintained procedure control over its radiation protection plan (RPP) and SOPs by reviewing and approving SOP changes through License Condition 27(e) authorization. The records appeared to be maintained in accordance with the requirements of 10 CFR 20.2102.

e. Security

The licensee maintains 22 radioactive check sources in a secured cabinet safe. The cabinet was observed to be locked and the appropriate posting was in place. The sources were leak-tested and inventoried quarterly by procedure KM-CI-RP-35 "Source Receipt, Control, Inventory, Leak Testing & Disposal," Revision 5, March 26, 2002. Quarterly inventories and leak testing were performed through May 21, 2003, with all sources accounted for.

f. ALARA Committee

The minutes of the quarterly ALARA Committee were reviewed for calender year 2002, and the first quarter of 2003, which met on May 14, 2003. The RSO confirmed that ALARA Committee meetings have been held each calender quarter. A special ALARA Committee meeting was held on June 26, 2002, to discuss the NRC Notice of Violation dated November 26, 2001. The minutes of this ALARA Committee meeting appeared to adequately address measures to prevent recurrence. The ALARA Committee established ALARA goals with an administrative limit of 100 mRem/year for individuals and 200 mRem/year for the collective dose. These goals were established for calendar year 2003. In addition, the ALARA Committee met on March 12, 2002, to approve

organizational changes to the radiation protection plan listing Jeff Lux as the Site Manager of the Cimarron facility as noted in Section 2.3 of the RPP. A License Condition 27(e) evaluation was performed on March 14, 2003, to revise the RPP in Revision 3. The Committee met again on June 18, 2002, to approve the RPP (Annex A) revision for implementation of the change.

g. Removable Contamination Surveys

Since the last inspection, the ALARA committee approved the discontinuance of 15 survey locations in the uranium building due to the building being released by NRC. Procedures require removable alpha contamination surveys using wipes be conducted weekly at 10 locations whenever significant decommissioning activities are performed. Change rooms, offices, count and instrument rooms, soil count room, guard station and laundry room were included in the 10 wipe locations. Area wipes not conducted as part of the routine weekly wipe surveys were last performed on January 22, 2003, during the most recent significant decommissioning activities. Personnel monitoring devices were surveyed for removable contamination on January 15, 2003, before being shipped for processing. Results for all removable contamination surveys reviewed were less than the minimum detectable activity (MDA).

h. Training

All persons who were permitted to enter the Cimarron facility restricted areas received information and training in radiation safety. The depth of the training was commensurate with the potential radiation safety problems and was in compliance with the requirements of 10 CFR 19 and 10 CFR 20. The licensee had several levels of training, such as visitor, escorted radiation worker, radiation worker, and health physics technician training. The RSO was responsible for training workers. Visitor training requirements were approved by the RSO, but may be administered by radiation workers.

One new employee had been hired since the last inspection. The individual, hired on March 3, 2003, as an administrative assistant. This individual had received hazardous communication, health and safety plan, and hearing conservation training. Site specific annual radiation protection training was presented in June 2003. The licensee had conducted monthly safety meetings covering areas of sanitation, first-aid, healthy living, stresses in the work place, and severe acute respiratory syndrome (SARS).

1.3 Conclusions

Radiation survey instruments used were operable and within their calibration interval. No occupational exposure was received in 2002 or the first quarter of 2003. Radioactive sources were stored in a locked and properly labeled cabinet. The ALARA Committee had met quarterly through the first quarter of 2003, with one additional Special ALARA Committee meeting on June 26, 2002. All removable contamination surveys reviewed were less than the minimum detectable activity. Appropriate training has been presented to all affected individuals. The licensee had adequately implemented the health physics program.

2 Radioactive Waste Management and Waste Generator Requirements and Transportation Activities (84850 and 86740)

2.1 Inspection Scope

The inspectors interviewed licensee representatives, toured the radioactive waste storage area, and reviewed applicable records related to radioactive waste management to determine if the licensee had established and maintained an effective program, and to determine whether transportation of licensed materials was in compliance with the applicable NRC and US Department of Transportation regulations.

2.2 Observations and Findings

There were no radioactive waste shipments made since the last inspection. The last shipment of radioactive waste was on October 2000. The shipment consisted of ten 55-gallon drums of soil and debris. The shipment contained material that was characterized as waste greater than the Branch Technical Position (BTP), Option 2 concentration limit of 100 pCi/g uranium; therefore, requiring burial offsite. There had been no offsite nor onsite disposal of decommissioning wastes since the last inspection. No decommissioning waste material had been free released.

At the time of the inspection, radioactive waste was being stored at the facility waiting disposal. This waste originated during the decommissioning of monitoring Well 1319. The decommissioning of Well 1319, completed in February of 2003, generated approximately 200 pounds of contaminated sediments and soil. The casing of the well was at ground level and not elevated or covered as the standard sampling wells were constructed. Eventually, contaminated particulates were allowed to get inside the casing and accumulate at the bottom over the years. As a result of the decommissioning of the well's components, the sediments were removed and dried. The licensee is temporarily storing the waste on a pallet in 14 plastic bags inside the uranium building located in (Area K). The bags were stored away from daily personnel traffic. Licensee management accompanied the inspectors to conduct radiological surveys of the waste. Readings were consistent with those from background levels.

In March of 2003, Cimarron personnel surveyed the waste containers for fixed and removable contamination using Ludlum and Tennelec detectors. Surveying at 3 inches, the maximum radiation detected was 1,454 cpm. At 1-meter, the reading was 5 mRem. Removable contamination surveys identified 0.51 dpm/100 cm^2 for alpha particles and a maximum of 1.30 dpm for beta particles. Analysis results obtained in March of 2003 from samples sent to the Cushing facility, revealed a maximum activity of 8.72 pCi/g and a minimum of 5.81 pCi/g total uranium.

2.3 Conclusions

No disposal of decommissioning wastes, nor shipments of radioactive waste had occurred since the last inspection. Approximately 200 pounds of monitor well sediment and soil waste is temporarily being stored in the uranium building. The licensee had

effectively implemented the license requirements related to the management and shipment of radioactive waste.

3 Management Organization and Controls (88005, 88104)

3.1 Organizational Structure

a. Inspection Scope

The inspectors interviewed cognizant licensee staff regarding the licensee's organizational structure and reviewed related documentation.

b. Observations and Findings

Figure 3-1 of Revision 5 to the Cimarron Radiation Protection Plan describes the revised organizational reporting chain. On January 2, 2003, the licensee entered into a contractual agreement with NEXTEP Environmental for site management. With this agreement all former independent contractors were to report to the NEXTEP site manager. On June 24, 2003, the Cimarron ALARA Committee approved the License Condition 27(e) evaluation of the change in the organizational reporting chain. On June 24, 2003, the NEXTEP site manager implemented the revised organizational reporting chain.

Major changes to the organization included: the reporting of the quality assurance coordinator, the health physics staff, and the clerical staff to the NEXTEP site manager. The NEXTEP site manager reported to the project manager, Kerr-McGee. The project manager is also titled manager, planning and regulatory compliance. This position reported to the program manager, safety and environmental affairs division, Kerr-McGee. The program manager in turn reported to the vice president, Cimarron Corporation, Kerr-McGee, who was also titled director of chemical and nuclear environmental remediation, safety and environmental affairs division, Kerr-McGee. It should be noted that in the revised organization reporting chain, the quality assurance coordinator maintained a dashed link to the vice president, Cimarron Corporation.

The position of health physics supervisor/radiation safety officer had been re-titled as radiation safety officer. This position reported to the program manager, safety and environmental affairs division, Kerr-McGee.

c. Conclusions

The inspectors concluded that the revised organizational reporting chain did not cause a degradation in safety or environmental commitments addressed in the NRC approved Cimarron Radiation Protection Plan nor the Decommissioning Plan.

3.2 Procedure Controls

a. Inspection Scope

The inspectors reviewed radiation protection procedures revised since the last inspection to verify that the licensee's system for approving procedures complies with license requirements.

b. Observations and Findings

Section 2.1.1 of Procedure KM-CI-RP-6, Procedure Generation, Review, and Approval, states that the "Health Physics Supervisor/Radiation Safety Officer (HPS/RSO) is responsibility for approving all Cimarron radiation protection procedures."

Since the last inspection in June 2002, the licensee had revised six radiation protection procedures. All procedures were approved by the radiation safety officer.

c. Conclusions

Radiation protection procedures were reviewed and approved by the RSO.

3.3 Reviews, Audits, and Assessments

a. Inspection Scope

The inspectors reviewed audit report Numbers 02-09-005, 02-09-006, and 03-02-007. The inspectors also reviewed quality assurance surveillance checklists and inspection form reports S-03-006, and S-02-059.

b. Observations and Findings

The inspectors noted that the auditors were independent of the areas audited, trained and qualified and the audit and surveillances included performance-based elements. Audits had corrective actions completed and signed by appropriate responsible party.

b. Conclusions

The inspectors concluded that audit and surveillances were being effectively and objectively implemented.

3.4 Safety Committee

a. Inspection Scope

The inspectors reviewed the ALARA Committee membership and meeting minutes for compliance with applicable requirements.

b. Observations and Findings

License Condition 27(e).3 specifies that the membership of the ALARA Committee shall consist of a minimum of three individuals employed by the licensee and one of these shall be designated as the ALARA Committee chairman. Membership shall include an individual with expertise in management; one individual expertise in decommissioning and one member shall be the site corporate RSO.

The inspectors noted that the Cimarron ALARA Committee membership consisted of three individuals employed by the licensee with assistance from contractor staff. The membership included the RSO and individuals with expertise in management and decommissioning. As noted on Section 1.2 f above, the ALARA Committee had met at least quarterly.

c. Conclusions

The Cimarron ALARA Committee membership met the requirements of License Condition 27(e).3.

4 Environmental Protection (88045, 88104)

4.1 Inspection Scope

The environmental protection program was reviewed to assess the effectiveness of the licensee's programs and to evaluate the impact, if any, of site activities on the local environment.

4.2 Observations and Findings

a. Environmental Monitoring

Section 15 of the Cimarron Radiation Protection Plan requires the licensee to implement an environmental monitoring program. The licensee's environmental monitoring program includes monitoring surface water and groundwater well sites. The licensee's program no longer requires the licensee to submit an annual environmental report to the NRC; however, the analytical data is retained on-site.

b. Surface Water Monitoring

Surface water samples were collected annually at seven locations and were analyzed for gross alpha, gross beta, and total uranium concentrations. All results for total uranium analysis were below the applicable effluent concentration limit specified in 10 CFR Part 20, Appendix B, Table 2.

c. Groundwater Monitoring

Water samples were collected annually from 25 monitoring wells. All samples were analyzed for gross alpha, gross beta, and total uranium concentrations. Some water

samples were also analyzed for technicum-99. The inspectors reviewed the 2002 analytical groundwater data used to compile the annual environmental report. Monitoring Well 1315A had the highest total uranium of 2509 pCi/l.

In July 2002, monitoring Wells 1315 and 1316 were replaced by 1315A and 1316A, respectively. The existing monitoring wells were replaced because they were screened in more than one water-bearing unit.

The licensee continued to monitor the contaminated groundwater within and adjacent to Burial Area 1. Monitoring wells in this area have reported total uranium concentrations in the groundwater greater than the 180 pCi/l total uranium release criteria specified in the license for groundwater. The licensee is continuing to monitor these wells.

4.3 Conclusions

The licensee had procedures and practices in place to implement the environmental protection program at the site. All environmental samples were taken as required by the licensee.

5 Closeout Inspection and Survey (83890)

5.1 Inspection Scope

On June 24-25, 2003, NRC staff observed the collection of 23 groundwater samples from wells and two seeps. The samples were split between the licensee and NRC. The NRC hydrologist preserved the NRC splits by acidification on collection. The NRC splits were sent to the NRC's contractor laboratory operated by Environmental Survey and Site Assessment Program (ESSAP) of the Oak Ridge Institute for Science Education. The NRC splits were analyzed for gross alpha and gross beta, and by alpha spectroscopy for uranium. Seventeen of the samples were analyzed for technetium-99 by chemical separation and radiological analysis. The licensee splits were sent to a contract laboratory for analysis. One blind duplicate sample was sent to the NRC laboratory for quality assurance. There are no NRC groundwater release criteria for gross alpha or gross beta.

NRC License SNM-928, issued to Cimarron Corporation, lists the release criteria in License Condition 27. The applicable values are:

Groundwater

6.7 Bq/l (180 pCi/l) total uranium

The attachment to a letter from the NRC project manager to the licensee's, Jess Larsen dated March 13, 1997, states that the technetium-99 concentration in groundwater should not exceed the US Environmental Protection Agency's Interim Primary Drinking Water Regulations (40 CFR 141.16). This regulation requires that the average annual concentration in drinking water shall not produce an annual dose equivalent to the total

body or any internal organ greater than 4 mRem/yr. The NRC derived concentration limit for Tc-99 is 3,790 pCi/l.

Results Comparisons

The criteria in NRC Inspection Procedure 84525, "Quality Assurance and Confirmatory Measurements," was used for comparison of licensee and NRC results. The table that follows lists the criteria.

TABLE 1
Acceptance Criteria[1]

Resolution[2]	Ratio[3]
<4	0.4 - 2.5
4 - 7	0.5 - 2.0
8 - 15	0.6 - 1.66
16 - 50	0.75 - 1.33
51 - 200	0.80 - 1.25
>200	0.85 - 1.18

[1] Criteria from Inspection Procedure 84525, Quality Assurance and Confirmatory Measurements for In-Plant Radiochemical Analysis
[2] Resolution is the NRC result divided by its associated 1σ uncertainty.
[3] Ratio is the licensee result divided by NRC result.

5.2 Observations and Findings

Table 2 summarizes the ESSAP and licensee's gross alpha and gross beta sample results. Five of the gross alpha and two gross beta analysis results were not in statistical agreement between ESSAP and the licensee's contract laboratory. This lack of agreement is not considered significant because, with the exception of one sample located on a known plume (1319 C1), the results were well below applicable release criteria and were near background. Table 3 summarizes the uranium alpha spectrum analysis results. At five locations the analytical results for total uranium exceeded the applicable release criteria of 180 pCi/l. These were locations within a known plume and adjacent to Burial Area 1. This plume is believed to be the result of radiological material that had been previously buried hydrologically up gradient from these wells. These wells were part of the licensee's characterization the plume.

Table 4 summarizes the technetium-99 analytical results. All measurement results for Tc-99, but one, were below the release criteria as determined by NRC. This location was at Seep 1208, where the licensee's contract laboratory measured a concentration of 5,300 ± 190 pCi/l. This value was not in agreement with the value reported for this location by the NRC contract laboratory. For Tc-99, the NRC contract laboratory measured 1,790 ± 210 pCi/l for this sample. The analytical results between the NRC

contractor laboratory and the licensee contract laboratory when compared using the criteria in NRC Inspection Procedure 84525, "Quality Assurance and Confirmatory Measurements," were all in agreement, except for Seep 1208.

TABLE 2
Kerr-McGee Cimarron Site
Groundwater Samples Gross Alpha and Gross Beta Analysis Results
Samples Collected on June 24-25, 2003

Sample Location	ALPHA ACTIVITY pCi/L			BETA ACTIVITY pCi/L			Beta/Alpha Ratio	
	NRC (ESSAP) Results	K-M Results	Agree?	NRC (ESSAP) Results	K-M Results	Agree?	NRC	K-M
T-60	35.1± 7.9	16.7 ± 4.88	No	18.1 ± 4.2	26.8 ± 5.11	Yes	0.52	1.60
T-53	12.8 ± 4.6	15.8 ± 4.53	Yes	21.4 ± 3.7	21.3 ± 4.58	Yes	1.67	1.35
T-51	12.3 ± 3.4	27.7 ± 5.27	Yes	12.8 ± 2.9	21.3 ± 4.44	Yes	1.04	0.77
T-58	25.9 ± 3.6	34.3 ± 6.20	Yes	79.2 ± 7.3	64.1 ± 6.53	Yes	3.06	1.87
T-57	20.7 ± 3.5	49.9 ± 7.24	No	345 ± 31	287 ± 12.1	Yes	16.67	5.75
T-54	21.8 ± 5.5	26.6 ± 6.03	Yes	820 ± 81	678 ± 18.8	Yes	37.61	25.49
T-55 (Dup)	31.3 ± 6.6	12.9 ± 4.84	No	324 ± 34	343 ± 13.6	Yes	10.35	26.59
1208	151 ± 17	205 ± 10.9	No	1740 ± 170	1550 ± 17.7	Yes	11.52	7.56
T-55	27.8 ± 6.0	12.9 ± 4.84	No	351 ± 37	343 ± 13.6	Yes	12.63	26.59
T-56	11.5 ± 2.0	Not Analyzed	--	118 ± 11	Not Analyzed	--	10.26	--
1336A	74.1 ± 6.7	26.6 ± 2.71	No	554 ± 48	424 ± 7.28	Yes	7.48	15.94
1312	125 ± 12	59 ± 4.6	No	1080 ± 99	978 ± 11.5	Yes	8.64	16.58
1315R	1510 ± 90	1780 ± 21.5	Yes	455 ± 40	577 ± 8.72	Yes	0.30	0.32
TMW13	2070 ± 140	1550 ± 21.4	Yes	526 ± 49	576 ± 8.87	Yes	0.25	0.37
1352	322 ± 19	409 ± 9.53	Yes	146 ± 13	182 ± 5.06	Yes	0.45	0.44
1206	108.1 ± 7.8	95.1 ± 4.62	Yes	33.1 ± 3.4	33.1 ± 2.61	Yes	0.31	0.35
1350	62.8 ± 5.4	50.2 ± 3.41	Yes	46.4 ± 4.5	34.3 ± 2.65	No	0.74	0.68
1348	104.9 ± 6.9	129 ± 11.8	Yes	28.5 ± 2.9	31.5 ± 4.66	Yes	0.27	0.24
1349	44.2 ± 4.5	63.1 ± 9.67	No	10.7 ± 1.8	11.1 ± 3.16	Yes	0.24	0.18
1331	89.0 ± 7.0	91.3 ± 11.2	Yes	20.8 ± 2.5	18.5 ± 3.93	Yes	0.23	0.20
1326	7.5 ± 1.5	7.15 ± 3.4	Yes	16.7 ± 2.0	11.0 ± 2.97	No	2.23	1.54
1319C1	346 ± 34	225 ± 15.2	No	79 ± 10	60.3 ± 5.19	Yes	0.23	0.27
1319B1	163 ± 13	151 ± 14.6	Yes	49.2 ± 5.4	52.0 ± 5.97	Yes	0.30	0.34
1319A1	53.0 ± 4.9	53.3 ± 8.50	Yes	17.6 ± 2.1	14.3 ± 3.42	Yes	0.33	0.27

[a] Uncertainties are total propagated uncertainties at the 95% confidence level (two sigma).

TABLE 3
Kerr-McGee Cimarron Site
Groundwater Samples Uranium Alpha Spectroscopy Analysis Results
Samples Collected on June 24-25, 2003

Sample Location	Radionuclide Concentration pCi/l								
	U-234		U-235		U-238		Total U		
	NRC	KM	NRC	KM	NRC	KM	NRC	KM	Agree?
T-60	12.9 ± 1.4	11.4 ± 3.11	0.52 ± 1.4	1.75 ± 1.21	6.98 ± 0.90	8.37 ± 2.59	20.4 ± 1.7	8.37	Yes
T-53	9.1 ± 1.0	9.19 ± 1.35	0.28 ± 0.18	1.13 ± 0.43	4.54 ± 0.67	4.56 ± 0.88	13.9 ± 1.3	14.9	Yes
T-51	14.3 ± 1.4	14.7 ± 1.93	0.72 ± 0.32	0.56 ± 0.34	8.23 ± 0.97	10.4 ± 1.52	23.3 ± 1.8	25.7	Yes
T-58	19.4 ± 1.7	20.3 ± 4.18	1.01 ± 0.29	3.21 ± 1.52	5.91 ± 0.74	5.09 ± 1.88	26.3 ± 1.9	28.6	Yes
T-57	14.4 ± 1.5	13.2 ± 3.18	0.75 ± 0.27	2.09 ± 1.19	4.48 ± 0.66	5.55 ± 1.94	19.6 ± 1.6	20.8	Yes
T-54	3.93 ± 0.67	4.47 ± 0.90	0.12 ± 0.17	0.55 ± 0.31	2.35 ± 0.48	1.87 ± 0.56	6.40 ± 0.84	6.89	Yes
T-55 (Dup.)	3.90 ± 0.61	2.93 ± 0.76	0.14 ± 0.11	0.08 ± 0.11	2.49 ± 0.47	2.21 ± 0.64	6.52 ± 0.78	5.22	Yes
1208	2.35 ± 0.48	1.63 ± 0.50	0.13 ± 0.14	0.28 ± 0.20	0.55 ± 0.22	0.80 ± 0.34	3.03 ± 0.55	2.72	Yes
T-55	2.78 ± 0.61	2.93 ± 0.76	0.10 ± 0.15	0.08 ± 0.11	2.17 ± 0.48	2.21 ± 0.64	5.05 ± 0.79	5.22	Yes
T-56	1.85 ± 0.50	2.73 ± 0.35	0.02 ± 0.19	0.11 ± 0.06	1.20 ± 0.36	1.07 ± 0.20	3.07 ± 0.65	3.91	Yes
1336A	18.1 ± 1.9	16.6 ± 3.94	0.72 ± 0.28	2.20 ± 1.23	6.20 ± 0.88	5.74 ± 2.06	25.0 ± 2.1	24.5	Yes
1312	23.9 ± 2.2	23.0 ± 2.54	1.03 ± 0.33	1.23 ± 0.46	8.6 ± 1.1	8.14 ± 1.27	33.5 ± 2.5	32.4	Yes
1315R	1,250 ± 94	1350 ± 203	72.0 ± 6.0	90.8 ± 21.6	803 ± 60	907 ± 141	2,130 ± 110	2348	Yes
TMW13	1,327 ± 98	1210 ± 179	78.2 ± 6.4	140 ± 28.4	820 ± 60	809 ± 123	2,230 ± 110	2159	Yes
1352	199 ± 16	178 ± 32.1	11.8 ± 1.5	33.3 ± 10.5	250 ± 20	236 ± 40.1	461 ± 25	447.3	Yes
1206	93.3 ± 7.3	80.5 ± 13.1	4.59 ± 0.74	8.72 ± 2.71	24.4 ± 2.2	23.8 ± 5.13	122.3 ± 7.7	113.03	Yes
1350	45.5 ± 3.8	42.7 ± 7.71	2.58 ± 0.54	3.23 ± 1.54	10.5 ± 1.2	10.3 ± 2.91	58.6 ± 4.1	56.2	Yes
1348	92.5 ± 6.9	90.2 ± 9.36	3.95 ± 0.65	8.98 ± 1.10	28.8 ± 2.5	28.8 ± 3.12	125.3 ± 7.4	128	Yes
1349	57.8 ± 4.6	58.8 ± 4.76	2.84 ± 0.55	3.69 ± 0.46	8.9 ± 1.0	9.55 ± 0.94	69.6 ± 4.7	72.04	Yes
1331	79.1 ± 6.4	72.9 ± 5.66	4.13 ± 0.76	6.78 ± 0.69	15.4 ± 1.6	14.0 ± 1.24	98.6 ± 6.6	93.68	Yes
1326	3.69 ± 0.60	3.95 ± 0.47	0.14 ± 0.11	0.16 ± 0.08	2.22 ± 0.44	1.64 ± 0.26	6.06 ± 0.76	5.75	Yes
1319C1	190 ± 14	190 ± 14.1	8.9 ± 1.1	11.6 ± 1.03	29.3 ± 2.6	30.6 ± 2.44	228 ± 15	232.2	Yes
1319B1	161 ± 12	165 ± 12.2	7.8 ± 1.0	9.78 ± 0.89	23.6 ± 2.2	25.7 ± 2.06	192 ± 12	200.48	Yes
1319A1	38.8 ± 3.4	36.6 ± 2.93	1.80 ± 0.46	4.67 ± 0.52	6.49 ± 0.88	6.74 ± 0.68	47.1 ± 3.5	48.01	Yes
NRC Release criteria							180 pCi/l		

[a] Uncertainties are total propagated uncertainties at the 95% confidence level (two sigma).

TABLE 4
Kerr-McGee Cimarron Site
Groundwater Samples Technetium-99 Analysis Results
Samples Collected on June 24-25, 2003

Sample Locations	NRC (ESSAP) Results pCi/l	Kerr-McGee (GEL) Results pCi/l	Beta/Alpha Ratio		Agreement Status[1]
			NRC	Kerr-McGee	
T-60	14.4 ± 9.4	11.7 ± 9.21	0.52	1.60	Yes
T-53	20.6 ± 9.7	17.5 ± 9.97	1.67	1.35	Yes
T-51	9.4 ± 9.2	10.6 ± 9.27	1.04	0.77	Yes
T-58	125 ± 19	124 ± 16.8	3.06	1.87	Yes
T-57	615 ± 75	671 ± 35.9	16.67	5.75	Yes
T-54	1400 ± 170	1480 ± 52.0	37.61	25.49	Yes
T-55 (Duplicate)	659 ± 80	767 ± 38.5	10.35	26.59	Yes
1208	1790 ± 210	5300 ± 190	11.52	7.56	No
T-55	717 ± 87	767 ± 38.5	12.63	26.59	Yes
T-56	212 ± 28	220 ± 20.7	10.26	--	Yes
1336A	950 ± 120	952 ± 42.1	7.48	15.94	Yes
1312	1950 ± 230	2060 ± 61.8	8.64	16.58	Yes
1315R	18.6 ±9.5	Not Analyzed	0.30	0.32	--
TMW13	13.0 ± 9.2	Not Analyzed	0.25	0.37	--
1352	26.5 ± 9.9	Not Analyzed	0.45	0.44	--
1206	12.0 ± 9.1	Not Analyzed	0.31	0.35	--
1350	52 ± 12	Not Analyzed	0.74	0.68	--
1348	6.5 ± 8.9	Not Analyzed	0.27	0.24	--
Equivalent to drinking water standard of 4 mRem/year criterion as determined by NRC	3,790 pCi/L				

[1] Agreement status determined from Table 1 Acceptance Criteria above.
[2] 1206 and 1208 are seeps. Therefore the 60,000 pCi/l Part 20 Appendix B effluent release criteria applies.
[a] Uncertainties are total propagated uncertainties at the 95% confidence level (two sigma).

5.3 Conclusions

The groundwater analytical result from five well locations exceeded the applicable release criteria of 180 pCi/l for total uranium. These samples were collected from wells located on a known groundwater plume. All measurements result for Tc-99, but one, were below 3,790 pCi/l. The one exception was at Seep 1208 as measured by the licensee's contract laboratory.

6 Follow-up (92701)

6.1 (Closed) Inspection Follow-up Item 070-00925/0101-02: Lack of Agreement between NRC and Licensee analysis for Tc-99

During the 2001 inspection, the inspectors noted that when the Tc-99 analysis results between the NRC contractor laboratory and the licensee contract laboratory were compared using the criteria in NRC Inspection Procedure 84525, "Quality Assurance and Confirmatory Measurements," four of the five analyses were not in agreement. Based on a series of quality tests conducted by an NRC contractor laboratory, the NRC regional and headquarters cognizant staff concluded that the lack of agreement in the TC-99 analysis results was not due to sampling nor analytical methods employed by the licensee's contractor laboratories. In addition, of the 11 split samples obtained during this inspection, 10 of the 11 samples were in statistical agreement and therefore the problem was not repetitive. The one sample comparison not in agreement showed the licensee's value was conservative in relationship to the NRC analytical result. This item is considered closed.

7 Exit Meeting Summary

The inspectors presented the preliminary results of the inspection to licensee representatives at the conclusion of the site visit. After receipt and analysis of the last set of sample results, a telephonic exit meeting was conducted on September 11, 2003, between the lead inspector and the manager, planning and regulatory compliance, project manager. The licensee representatives acknowledged the findings as presented. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Licensee Cimarron Corporation

M. Logan, Vice President, Cimarron Corporation
D. Finch, Program Manager
J. Lux, Project Manager
K. Morgan, Radiation Safety Officer

NEXTEP Environmental (contractor)

S. Marshall, Principal
R. Callahan, Site Manager
W. Rogers, Health Physics Technician
L. Morgan, Health Physics Technician
L. Smith, Quality Assurance Coordinator
R. Williams, Hydrology Manager

INSPECTION PROCEDURES USED

IP 83822 Radiation Protection
IP 88104 Decommissioning Inspection Procedure for Fuel Cycle Facilities
IP 88045 Environmental Protection
IP 83890 Closeout Inspection and Survey
IP 84850 Radioactive Waste Management and Waste Generator Requirements
IP 86740 Transportation Activities

ITEMS OPENED, CLOSED AND DISCUSSED

Closed

070-00925/0101-02	IFI	Lack of Agreement between NRC and Licensee analysis for Tc-99.

Opened

070-00925/0301-01	URI	Determine if the Cimarron ALARA Committee was required to approve changes to Radiation Protection Procedures.

Discussed

None

LIST OF ACRONYMS

ALARA	As Low As Reasonably Achievable
Bq/l	Becquerels per liter
BTP	Branch Technical Position
CFR	Code of Federal Regulations
cpm	counts per minute
dpm/100 cm^2	disintegrations per minute per 100 squared centimeters
ESSAP	Environmental Survey and Site Assessment Program
HP	health physics
HPS/RSO	Health Physics Supervisor/Radiation Safety Officer
IFI	Inspection Follow-up Item
MDA	minium detectable activity
mRem	milliRem
µR/hr	microRoentgen/hour
NVLAP	National Voluntary Laboratory Accreditation Program
pCi/l	picocuries per liter
QA	quality assurance
RPP	radiation protection plan
RSO	radiation safety officer
SARS	severe acute respiratory syndrome
SNM	special nuclear material
SOP	standard operating procedure
SWP	special work permits
TLD	thermoluminescence dosimeters
TMW	temporary monitoring well

DOCUMENTS REVIEWED

Audits

- Audit Report Number 02-09-005, KM-CI-RP-62 Soil Counter, October 10, 2002.
- Audit Report Number 02-09-006, Sampling & Analysis Plan Documentation Section 8.0 & CM-SAP-111, October 16, 2002.
- Audit Report Number 03-02-007, Sampling & Analysis Plan Documentation Section 8.0 & CM-SAP-111, October 16, 2002.
- Quality Assurance Surveillance Checklist and Inspection Form Report S-03-006, Installation of Wells for Investigations in the Vicinity of Well #1319 & area North of Former the U-Ponds 1 & 2, dated April 8, 2003.
- Quality Assurance Surveillance Checklist and Inspection Form Report S-02-059, Investigation of B. G #1Groundwater Plume, dated August 7, 2002.

Radiation Protection Procedures

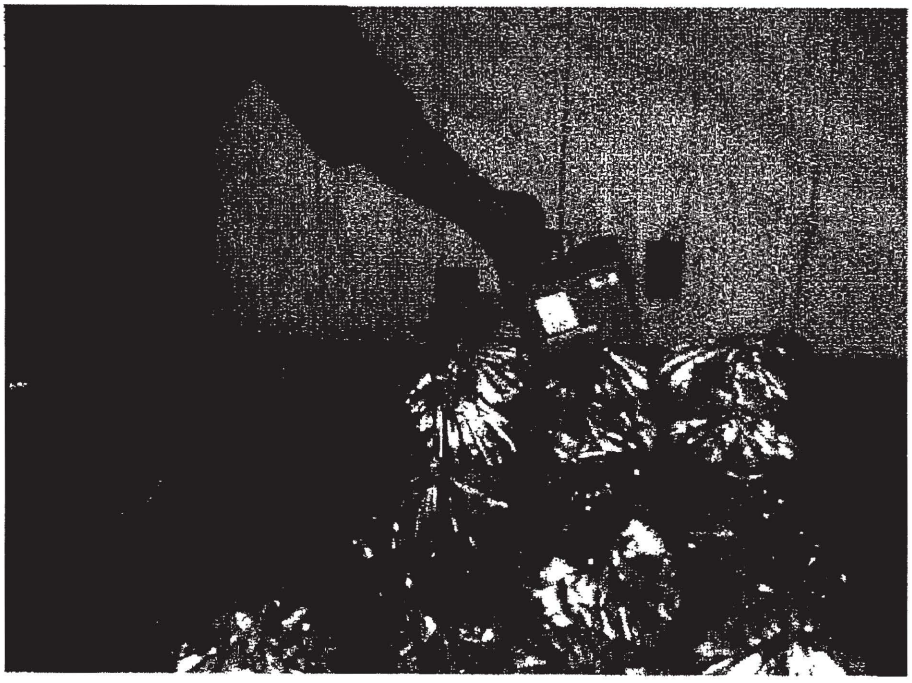
- KM-CI-RP-1, Organization and Responsibilities, Revision 9, Approved December 4, 2002.
- KM-CI-RP-4, Radiological Control and Safety Audits, Revision 6, Approved December 19, 2002.
- KM-CI-RP-6, Procedure Generation, Review, and Approval, Revision 4, Approved March 26, 2002.
- KM-CI-RP-7 Control of HP Records & Documents, Rev 2, April 18, 2001.
- KM-CI-RP-11 ALARA Committee, Rev 7, March 26, 2002.
- KM-CI-RP-22 SWP Preparation, Review, Approval & Use, Rev 3, September 18, 2000.
- KM-CI-RP-23 Rad Waste Packaging and Shipping, Rev 1, April 25, 1997.
- KM-CI-RP-33, Decontamination of Tools, Equipment, Materials and Surfaces, Revision 4, approved December 12, 2002.
- KM-CI-RP-35 Source Receipt, Control, Inventory, Leak Testing & Disposal, Rev 5, March 26, 2002.
- KM-CI-RP-38, Survey Requirements and Frequencies, Revision 5, Approved July 12, 2002.
- KM-CI-RP-39 Performance of Radiation & Contamination Surveys, Rev 4, September 14, 2000.

- KM-CI-RP-46 Calibration & Use of Radiation Detection Instruments, Rev 2, April 18, 2001.
- KM-CI-RP-54 Environmental Air Samples, Rev 1, October 4, 1996.
- KM-CI-RP-43, Environmental Monitoring, Revision 5, approved October 18, 2002.
- KM-CI-RP-62, Cimarron Soil Counter Operation, Revision 5, approved December 18, 2002.

Other Documents

- File "Yec-Vdm-052 (757C-01 Drums 5850 thru 5859)"; "Letter to Jess Larsen from Leigh Barrington (Envirocare) dated November 3, 2000."
- "1-4-8 Analytical Results/ Soil Samples"; "Sample ID Logs-CF-1650"; "2-12-03 Field Radiation Survey and Sample Record."
- Site Quality Assurance Program, June 2003.
- Radiation Protection Plan, Vol I, II, April 21, 2003.

IMAGES



October 6. 2003

Mr. Emilio M. Garcia
U.S. Nuclear Regulatory Commission
Region IV
Harris Tower, Suite 400
611 Ryan Plaza Drive
Arlington. TX 76011-8064

SUBJECT: REPORT FOR ANALYSIS OF THE SPLIT WATER SAMPLE WITH GENERAL ENGINEERING LABORATORIES FROM KERR-MCGEE CIMARRON, CRESCENT, OKLAHOMA (INSPECTION REPORT NO. 07000925/2003001) [RFTA NO. 03-001]

Dear Mr. Garcia:

The Environmental Survey and Site Assessment Program (ESSAP) of the Oak Ridge Institute for Science and Education (ORISE) received 24 water samples that were collected on June 24 and June 25, 2003 at the Kerr-McGee Cimarron facility in Cimarron, Oklahoma. A split of these 24 water samples was also sent to General Engineering Laboratories (GEL) in Charleston, South Carolina. ORISE sent results from these 24 samples to you in a letter report dated July 29, 2003. After reviewing the ORISE data, you requested, via a phone conversation on September 10, 2003, that ORISE send a portion of sample 862W008 (NRC sample ID seep N-1208-1847) to GEL and GEL send a portion of the same sample to ORISE. ORISE received the GEL sample portion on September 16, 2993 (ORISE sample 862W025). Therefore samples 862W008 and 862W025 are from the same NRC location. Both laboratories were to analyze the sample for Tc-99. ORISE performed Tc-99 analysis (Procedure AP5, Revision 14 and Procedure CP4, Revision 2) on both the sample sent from GEL (862W025) and the original sample (862W008). The Tc-99 results for 862W008 and 862W025 were found to be 3,510 ± 370 and 3,340 ± 350 pCi/L, respectively. The results of these two portions are statistically equal.

The original Tc-99 data given in the July 29, 2003 report for sample 862W008 was 1,790 ± 210 pCi/L. The discrepancy from the original data and the data presented here is attributed to sample matrix effects. ORISE's Tc-99 procedure utilizes a batch yield procedure in which a single sample is spiked with a known amount of Tc-99 and the calculated chemical recovery from this sample is applied to the entire set of samples in the batch. Typically this method of calculating chemical recovery is not a problem as long as all of the samples in the batch have similar matrices. After re-inspection of the original 24 samples sent in late July, the sample in question (862W008 and 862W025)

was noted as having a yellow color to it. This sample was the only one which had the discoloration. Evaluation of color would not typically be part of the evaluation of a sample batch for consistent matrices; however, in this case it proved to be significant. When the original Tc-99 analysis was performed, the sample that was used to calculate the chemical recovery was a sample that was not discolored. Therefore, the original calculated Tc-99 activity for 862W008 was underestimated due to the difference the matrix had on chemical yield.

ESSAP's Quality Control (QC) requirements were met for these analyses. The QC files are available for your review upon request.

Please contact me at (865) 241-3242 or Wade Ivey at (865) 576-9184 should you have any questions.

Sincerely,

Dale Condra
Laboratory Manager
Environmental Survey and
Site Assessment Program

RDC:WPI:ar

cc: T. McLaughlin, NRC/NMSS/TWFN 7F27
E. Knox-Davin, NRC/NMSS/TWFN 8A23
J. Peckenpaugh, NRC/NMSS/TWFN 7J8
K. Kalman, NRC/NMSS/TWFN 7F27
G. Purdy, NRC/NMSS/TWFN 7F27
R. Munoz, Region IV
E. Abelquist, ORISE/ESSAP
T. Vitkus, ORISE/ESSAP
File/862

Distribution approval and concurrence:	Initials	Date
Technical Management Team Member		
Quality Manager		

Regulatory Agency Contact Report	
Kerr-McGee Corporation	Cimarron
Agency: NRC	Agency Contact(s): Emilio Garcia
Type of Contact: Telephone	Kerr-McGee Contact(s): Jeff Lux, Karen Morgan, Rick Callahan, Larry Morgan, Pam Dunn
Date: September 11, 2003	Time: 1:00 a.m.

Contact Summary:

Emilio called to conduct an exit interview for the June, 2003 NRC inspection of the Cimarron site. Emilio had previously notified Cimarron that we failed to provide NRC the gross alpha and gross beta results for eight of the "T" wells for which we split samples. We discovered that the chain of custody form for those eight samples had incorrectly requested total uranium by alpha spec rather than gross alpha and gross beta. The lab still had the samples and agreed to run gross alpha and gross beta. During this exit call, Emilio noted that we still haven't provided gross alpha and gross beta results for one well – which it appears the lab left off their internal chain of custody. We told Emilio we will submit those results when we can. Emilio said that gross alpha and gross beta are not critical parameters and this will probably not be addressed in the inspection report.

Regarding correlation of sample data for the groundwater samples split during the June sampling event, Emilio said the gross alpha and gross beta results did not correlate very well. Due to the nature of the analyses, he did not expect good correlation, and since there are no license criteria for gross alpha and gross beta, this is not a problem and will not be addressed in the report. All total uranium results correlated very well. Out of eleven samples for which Tc-99 was run, all but one correlated very well. The one sample which didn't was Seep 1208 – GEL reported approximately 3 times the Tc-99 that ORISE did. Emilio recommends a "double split", whereby GEL sends a portion of their sample to ORISE and ORISE sends a portion of their sample to GEL. Both labs should run both samples in the same batch so the QA/QC data for both samples is the same. Rick Callahan will coordinate with the labs. Emilio provided Dale Condra's (ORISE contact) phone number – 865-241-3242.

Regarding condition 27(e), Emilio said they contacted Jim Lieberman (attorney), who provided some beneficial explanation. Jim said that if a procedure change does not change the SDP or the RPP, it does not require ALARA committee approval. However, license condition 10 contains numerous tie-downs, some of which may include procedures. If one of these tie-downs does include a procedure, then that procedure cannot be changed without ALARA committee approval. Jeff will review the license condition 10 tie-downs prior to the next ALARA committee meeting. This topic will be added to the agenda for the next ALARA committee. Until this evaluation is complete, this issue will remain an unresolved issue, and will be presented in the inspection report in this manner.

In summary, this inspection report will contain one unresolved item, no inspection followup items, and no violations, either cited or non-cited.

Distribution:

Mike Logan	Doug Finch	Karen Morgan
Roy Widmann	Rick Callahan	Steve Marshall
Harry Newman	Lavonna Smith	Pam Dunn

Prepared By: Jeff Lux

2-2-15-2

INSPECTION BRIEFING PARTICIPANTS

ENTRANCE BRIEFING: ( ) EXIT BRIEFING (X)

LICENSEE: Cimarron DATE: 6/26/2003

SUBJECT: NRC Inspection

NAME:	ORGANIZATION/POSITION:	PHONE#:
Mike Logan	KM-Director of Nuclear Regul.	405-270-2699
Ken KALMAN	NRC - Project Manager	301-415-6654
Doug Finch	KM - Program Mgr.	918/225-2515
JEFF LUX	KM - PROJ. MGR.	918/223/2522
Jon Peckenpaugh	NRC- hydrogeology	301-415-6753
Rick MUÑOZ	USNRC- RIV	(817) 860-8220
Ernesto Quinones	NRC - intern	(817) 860-8286
Karen Morgan	KM / RSO	(918) 225-8624
STEVE MARSHALL	NEXTEP	502-339-9767
W. G. Rogers	NEXTEP	405-433-2290
GARY PURDY	NRC	*301-415-7897
Emilio M. Garcia	USNRC	530 756 3910
LaVonna Smith	NEXTEP/QA	(405) 282-5680

3-2-15-1

INSPECTION BRIEFING PARTICIPANTS

ENTRANCE BRIEFING: (✓) EXIT BRIEFING

LICENSEE: Cimarron Corp. DATE: 6/24/2003

SUBJECT: 2003 NRC Inspection

NAME:	ORGANIZATION/POSITION:	PHONE#:
Karen Morgan	KM / RSO	918-225-8624
GARY PURDY	NRC/DWM	301-415-7897
Ken KALMAN	NRC/DWM	301-415-6664
Ernesto Quiñones	NRC/DWM	301-415-0271
Emilio M. GARCIA	NRC/RIV/DNMS/FCDB	530 756 3910
Rick Callahan	NEXTEP / Site Manager	405-282-5680
W.A. Rogers	NEXTEP	405-433-2290
STEVE MARSHALL	NEXTEP	502-339-9767
Rick Muñoz	US NRC R-IV	817-860-8220
JEFF Lux	KM/ Prot Mgr	918-223-2522
Jon Peckenpaugh	NRC/DWM	301-415-6753
LaVonna Smith	NEXTEP/QA	405-282-5680

. 7671 .

TRANSMISSION VERIFICATION REPORT

TIME : 06/27/2003 08:28
NAME : NEXTEP-CIMARRON
FAX : 14052823358
TEL : 14052822935
SER.#: BROD2N284318

DATE,TIME	06/27 08:26
FAX NO./NAME	15023399275
DURATION	00:01:06
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

Rick Munoz
Tom Heckenfriegel
Jeff Lux
Greg Fisch
Ken Kalman
Mike Lugo
LaVonna Smith
Gary Fredge
Emesto Quiñones
Will Rogers
Jim Marshall
Vance Morgan

3:00 PM (CT)
6/26/03
Page 1 of 3

NRC AUDIT EXIT

(1) Rad. Protection
No items of non-compliance
Inst Calibs, ALARA Comm, Surveys, Licensing, etc.

(2) Waste Management (8240)
None since last Inspection
Generated approx. 200 lbs during removal of Well #1319. This waste needs to be disposed off-site @ Envirocare or transfer to another authorized licensee.

(3) Management/Organization/Controls

(A) Site Organization. Organization was in place before the 27(e) was issued in final form.
Another requirement in 2001 before the ALARA

# of pages ▶ 3
Morgan

Emilio Garcia
Rick Munoz
Jon Leckenpaugh
Jeff Lux
Greg Finch
Ken Kalman
Mike Logan
LaVonna Smith
Gary Grady
Benegran Quiñonez
Will Rogers
Steve Marshall
Karen Mozer

3:00 PM (CT)
6/26/03
Page 1 of 3

NRC AUDIT EXIT

(1) Radn Protection
No items of non-compliance
Inst Calib, ALARA Comm, Surveys, Security, etc.

(2) Waste Management (86740)
None since last Inspection
Generated approx. 200 lbs during removal of Well #1319. This waste needs to be disposed off site @ Envirocare or transfer to another authorized licensee.

(3) Management/Organization/Controls

(A) Site Organization. Organization was in place before the 27(e) was issued in final form.
Another requirement in 2001 before the ALARA Committee approved. Emilio stated that this appeared to be a repeat violation. Emilio thinks this will be a violation
Jeff described that Kerr-McGee will strongly oppose that this is a repeat violation.
Emilio stated that he did not view that this was a safety issue. The 27(e) needs to be signed.
Emilio recommended that the organizational chart be moved

(B) License Condition 27(e) requires that all Radiation Protection Procedures be approved by the ALARA Committee. Emilio stated that this is the way that he reads the license condition.
Emilio believes that this Condition can be interpreted differently. Emilio plans to make this an unresolved issue

(B1) Emilio agrees that changing the procedure from hard copy to electronic copy would not constitute a revision.

(B2) HSRA Committee (March 14, 2002) change discussed and approved on March 12, and the implementation was by June, 2002. Emilio stated that he wanted the HSRA Committee to at least discuss various options.

Emilio asked that we follow our license and all regulatory requirements.

Mike Logan stated that Kerr-McGee should take the most conservative approach (i.e. review and approve all procedure revisions by the HSRA Committee).

(C) * Procedures contain different terms that need to be clarified. Current procedure references an Health Physics Supervisor - Need a common set of definitions.

* Need to ensure that all terminology regarding positions needs to be clarified.

(Emilio stated that this was going to be a comment)

(4) ENVIRONMENTAL PROTECTION

(4A) SAP → Does not contain a procedure describing how the associated procedures are written/revised/etc.

(4B) Procedure 104 tells individual to confirm pH < 2 with nitric acid. Not being done by Hydrology - Revise Procedure. Kerr-McGee person did not follow the procedure

Close-Out Inspection Survey

Tom Peckenpaugh stated that NLC worked with Larry/Will/Tracy and sampled 23 Env. Monitoring Sites (Wells and Seeps)
Tom stated that everything went very well.
ORISE results will be provided to Ken-McGee as soon as possible after receipt from ORISE.
Tom stated that NEXTEP was very helpful and was thankful for their assistance.

Follow-up Items

2001 Tc-99 Analysis result discrepancies.
Emilio stated that this issue will be closed.

Goal is to issue Report in 2 parts. First part will be the write-up/Report, etc by July 26, 2003.

CIMARRON CORPORATION

(QAP 17.01)

FILE CONTENTS INDEX

PROJECT NAME: 2003 NRC INSPECTION

FILE NAME: **Cabinet #** 3 **Drawer #** 2 **FOLDER #** 15

ITEM NO.	BRIEF DESCRIPTION
3-2-15-1	NRC INSPECTION ENTRANCE BRIEFING PARTICIPANTS
3-2-15-2	NRC INSPECTION EXIT BRIEFING PARTICIPANTS
3-2-15-3	Telephone Contact: Emilio Garcia/NRC to Cimarron 9/11/2003 RE: Exit interview for June, 2003 Inspection
3-2-15-4	NRC Inspection Report 070-00925/03-001 Sept. 18, 2003 (*attached* Report for Analysis of the Split Water Sample with GEL - sample #N-1208-1847)
3-2-15-5	
3-2-15-6	
3-2-15-7	
3-2-15-8	
3-2-15-9	
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