
CIMARRON
CORPORATION
Annual Submittal
of 27(e) Changes

March 31, 2004

CIMARRON CORPORATION

P.O. BOX 315 • CRESCENT, OK 73028

March 31, 2004

Mr. Kenneth Kalman
Low-Level Waste & Decommissioning Projects Branch
Division of Waste Management
Office of Nuclear Materials Safety & Safeguards
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Docket No. 70-925; License No. SNM-928
Annual Submittal of 27(e) Changes

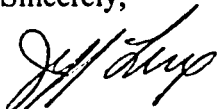
Dear Mr. Kalman:

License No. SNM-928, Condition 27(e), requires an annual report of all changes, tests, and experiments made during the previous year. Cimarron Corporation (Cimarron) made three changes in the Radiation Protection Plan during 2003. Enclosed please find documentation of the changes made, consisting of a summary of the change evaluation and a copy of the revised Radiation Protection Plan.

Full documentation of these changes is maintained on site in the Cimarron Quality Assurance records and is available for NRC inspection.

If you have questions or comments, please call me at 405-282-5680, ext. 120 (Cimarron) or 918-223-2522 (Cushing).

Sincerely,



Jeff Lux
Project Manager

xc: D. Blair Spitzberg, NRC Region IV

Attachments

MISSO1

CIMARRON

CORPORATION

Annual Submittal
of 27(e) Changes

March 31, 2004

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

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

Section 3, Figure 3-1 – Removal of Decommissioning Supervisor from Organizational Structure Chart.

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		No	
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5.0 Comments:

6.0 Performed By (Signature/Date):

Corporate Management:	<i>[Signature]</i>	Date: 1/13/03
Site Manager:	<i>[Signature]</i>	Date: 1/9/03
RSO:	<i>Karen Morgan</i>	Date: 1/8/03

7.0 Implemented By and Date:

Health Physics Manager:	<i>Rick Cuahan</i>	Date: 1/16/03
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Change Evaluation
ALARA Committee Approval of Revision to
Cimarron Annex A (Radiation Protection Plan)
December 18, 2002

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.

- Section 3, Figure 3-2 were revised to reflect changes in the organizational chart due to the removal of the position of decommissioning supervisor.

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 – *not applicable.*
 - 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 – *satisfied.*
 - b) Both the use and the place must be authorized – *satisfied.*
 - c) The action must not violate training requirements – *satisfied.*
 - d) Revisions to the RPP must be approved by the ALARA Committee – *The required parties are required to 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 – *All dose, both public and workers, is far below the limits. This action will not result in any increase in dose.*
- b) Liquid and airborne effluents will not exceed 10 CFR 20, Appendix B limits – *This 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 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.*
- b) The action must not impact the environment as evidenced by the environmental monitoring program – *It does not.*
- c) The action must not create the potential for an accident worse than that assumed in the dose assessment – *It does not.*
- d) The action must not result in an adverse socioeconomic impact to Cimarron and the surrounding community. – *It does not.*
- e) The action must not create other than short duration and minor impacts to air – *It does not.*

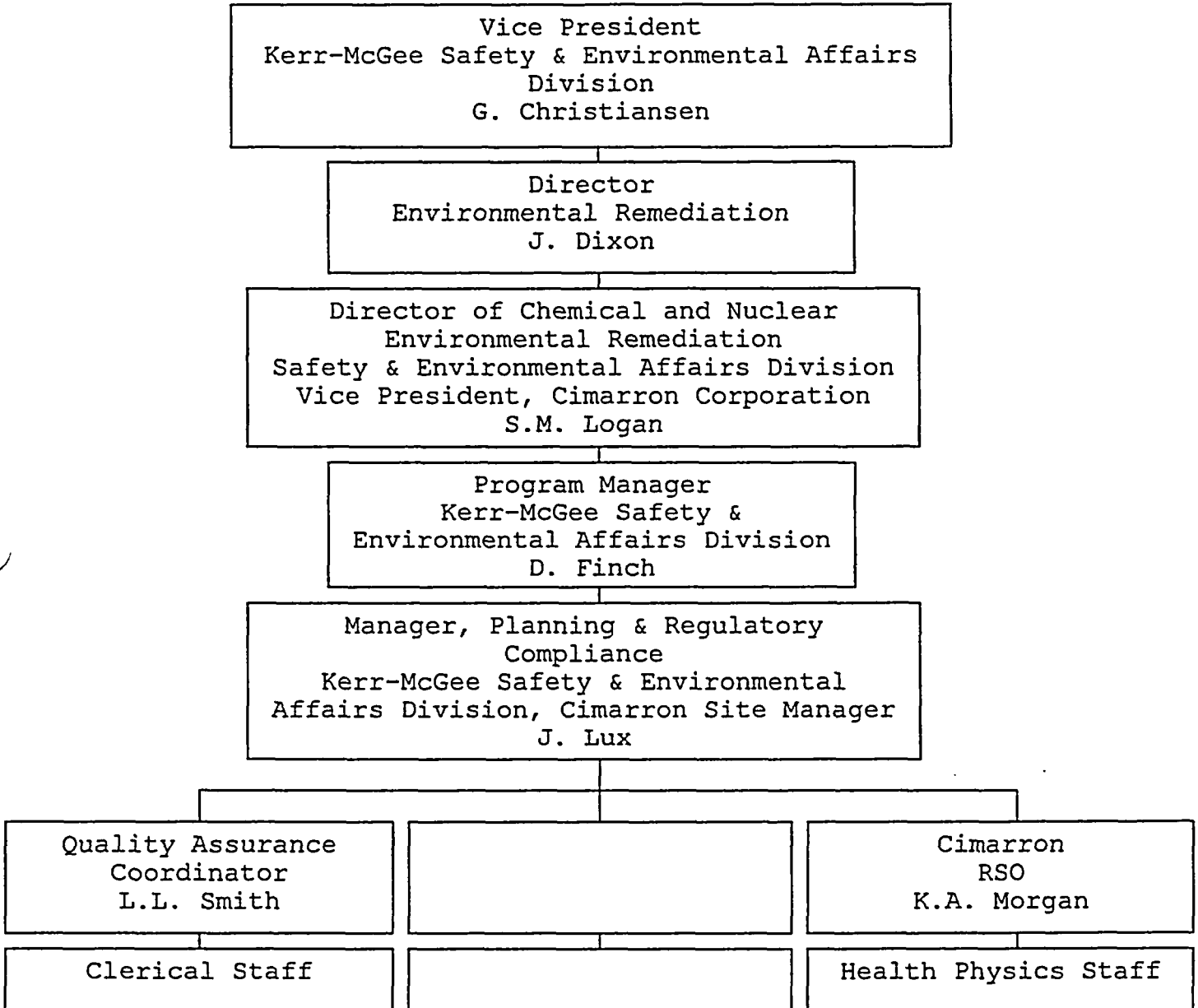
- f) The action must not change potential future land use – *It does not.*
- g) The action must not adversely impact transportation plans for shipments to a licensed disposal site – *It does not.*
- h) The action must not adversely impact endangered species – *It does not.*
- i) The action must not impact 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.

Figure 3-1

Kerr-Mcgee Corporation
Safety & Environmental Affairs Division
(Cimarron)



7-5-11-2

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

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

Revision to Organizational Chart – Responsibilities and Titles – Sections 2, 3, 4, 9, 12, 14

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	

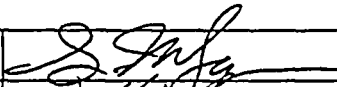
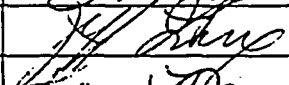
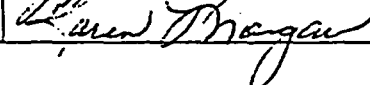
NOTE: If "YES" was answered in any of the section 3.0 evaluation questions, the proposed item cannot be performed without NRC approval. Provide any basis for determination of each answer in section 5.0, as appropriate.

4.0 Results:

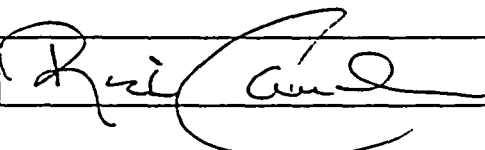
Revision, Test, or Experiment Approved:	Yes	✓	No
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5.0 Comments:

6.0 Performed By (Signature/Date):

Corporate Management:		Date: 6/23/03
Project Manager:		Date: 6/24/03
RSO:		Date: 6/23/03

7.0 Implemented By and Date:

Site Manager:		Date: 6/24/03
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Change Evaluation
ALARA Committee Approval of Revision to
Cimarron Annex A (Radiation Protection Plan)
June 19, 2003

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.

- Revisions to the Cimarron Organizational Chart reflecting titles and responsibilities.

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 – *not applicable.*
 - 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 – *satisfied.*
 - c) The action must not violate training requirements – *not applicable.*
 - d) Revisions to the RPP must be approved by the ALARA Committee – *The required parties are required to 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 – *not applicable.*
 - b) Liquid and airborne effluents will not exceed 10 CFR 20, Appendix B limits – *This 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 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.*
 - b) The action must not impact the environment as evidenced by the environmental monitoring program – *It does not.*
 - c) The action must not create the potential for an accident worse than that assumed in the dose assessment – *It does not.*
 - d) The action must not result in an adverse socioeconomic impact to Cimarron and the surrounding community. – *It does not.*
 - e) The action must not create other than short duration and minor impacts to air – *It does not.*
 - f) The action must not change potential future land use – *It does not.*
 - g) The action must not adversely impact transportation plans for shipments to a licensed disposal site – *It does not.*

- h) The action must not adversely impact endangered species – *Not applicable.*
- i) 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.

2.0 GENERAL INFORMATION

2.1 Section Overview

This section provides requirements for radiation safety definitions, gives the responsibilities of those involved in Cimarron Corporation radiological operations, and discusses radiation safety training requirements.

2.2 Definitions

Definitions are required to ensure that individuals understand the requirements of the regulations and the Radiation Protection Program at Cimarron Corporation. Cimarron Corporation shall utilize regulatory definitions whenever possible, or may use definitions that are more restrictive than the regulatory definition. In addition, Cimarron Corporation uses definitions which are consistent with standard industry guideline documents.

2.3 Responsibilities

Cimarron Corporation shall incorporate clearly defined responsibilities in the Radiation Protection Program. Each individual at Cimarron shares responsibility for their own radiation protection as well as for their co-workers and individual members of the public. Key responsibilities under the Radiation Protection Program are outlined below. Job specific responsibilities under the Radiation Protection Program shall be outlined in the Radiation Protection Program Procedures.

The Vice President, Cimarron Corporation provides corporate oversight of site activities of the Cimarron facility. The Vice President, Cimarron Corporation has ultimate responsibility for assuring that the Radiation Protection Plan at Cimarron Corporation is developed and implemented in a manner consistent with regulatory requirements and company policies. This responsibility is delegated to the Radiation Safety Officer.

The Program Manager is responsible for administrative and long-term management of the Cimarron facility. The Program Manager approves long-term planning and all changes associated with regulatory requirements and company policies.

The Manager of Planning and Regulatory Compliance functions as the Project Manager for the site. The Project Manager is responsible to provide sufficient resources to implement the Radiation Safety Program and to perform site activities. The Project Manager oversees site staff, monitors regulatory requirements, site activities, scheduling and budget status.

Deleted: here out known as Site Manager, is responsible for assuring that resources are allocated to the radiation protection program, that coordination between Supervisory personnel occurs, and that an effective response capability for emergency issues dealing with radioactive materials is maintained. The Site Manager also has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

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The Site Manager is responsible for daily site activities and oversees on site staff. The Site Manager has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

The ALARA Committee is responsible for reviewing, evaluating and approving the Radiation Protection Plan and changes to the plan in accordance with License Condition 27(e), reviewing operations dealing with radioactive materials and radiological controls, and providing direction to the Radiation Safety Officer for decisions involving ALARA, methods of operations, and approving annual ALARA goals for the Cimarron Facility.

The Radiation Safety Officer (RSO) is responsible for development, implementation, and oversight of the Radiation Protection Program. The RSO chairs the ALARA Committee and is responsible for bringing pertinent radiation protection and safety issues to the attention of the ALARA Committee. The RSO has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

The Quality Assurance Coordinator is responsible for assessments of the radiation protection program, for the maintenance and distribution of controlled documents, and for long-term storage of quality assurance documents after they are no longer required for operational purposes. The QA Coordinator has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

Each Activity Supervisor is responsible for the effective implementation of radiation protection procedures within their scope of activities. Each Activity Supervisor has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

Each employee at Cimarron Corporation is responsible for following regulatory requirements and Cimarron Corporation radiation protection procedures to the best of his/her ability and knowledge. These responsibilities include proper use of protective and personnel monitoring equipment, notifying management of any potential or real radiation hazards or improper practices, and maintaining his/her individual radiation exposure and that of others ALARA. All Cimarron Corporation employees should be aware of and heed the instructions on the "Notice to Employees" (NRC Form 3). Employees are subject to reprimand and possible discharge from the Company for activities deemed to be in violation of Company policy or regulatory requirements.

Employees are requested to contact management first regarding potential regulatory or license violations before contacting regulatory agencies. However, any employee who is not satisfied with the management response regarding the

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Figure 3-1

**Kerr-McGee Corporation
Safety & Environmental Affairs Division
(Cimarron)**

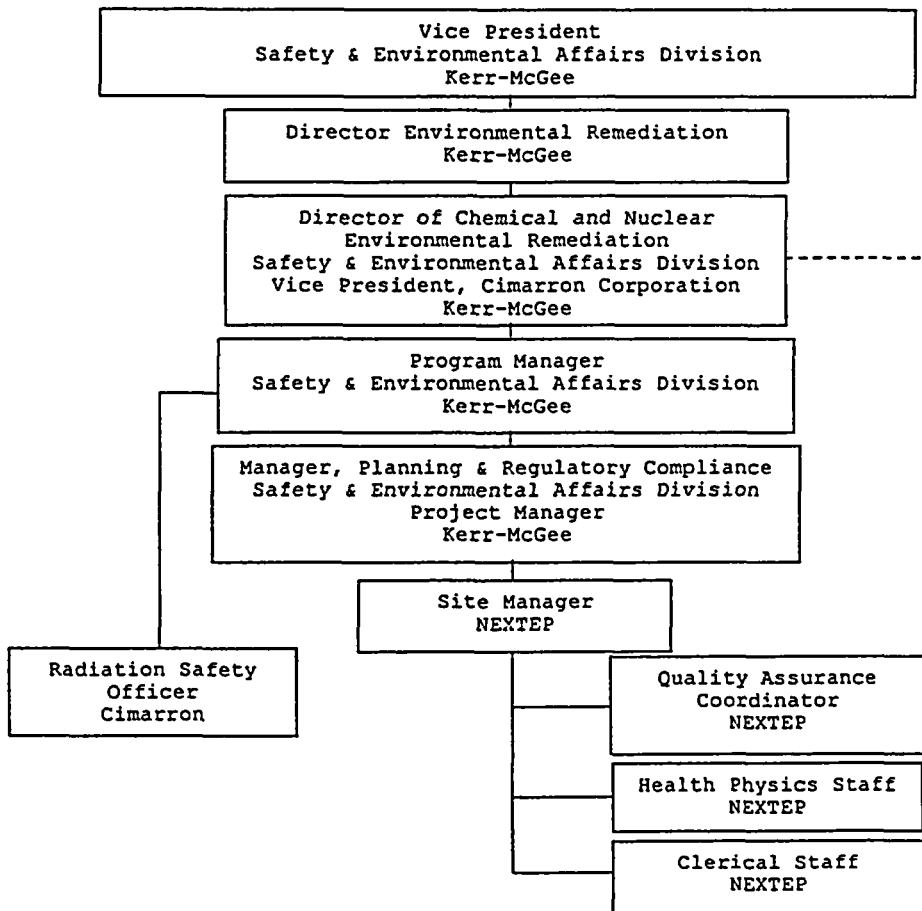
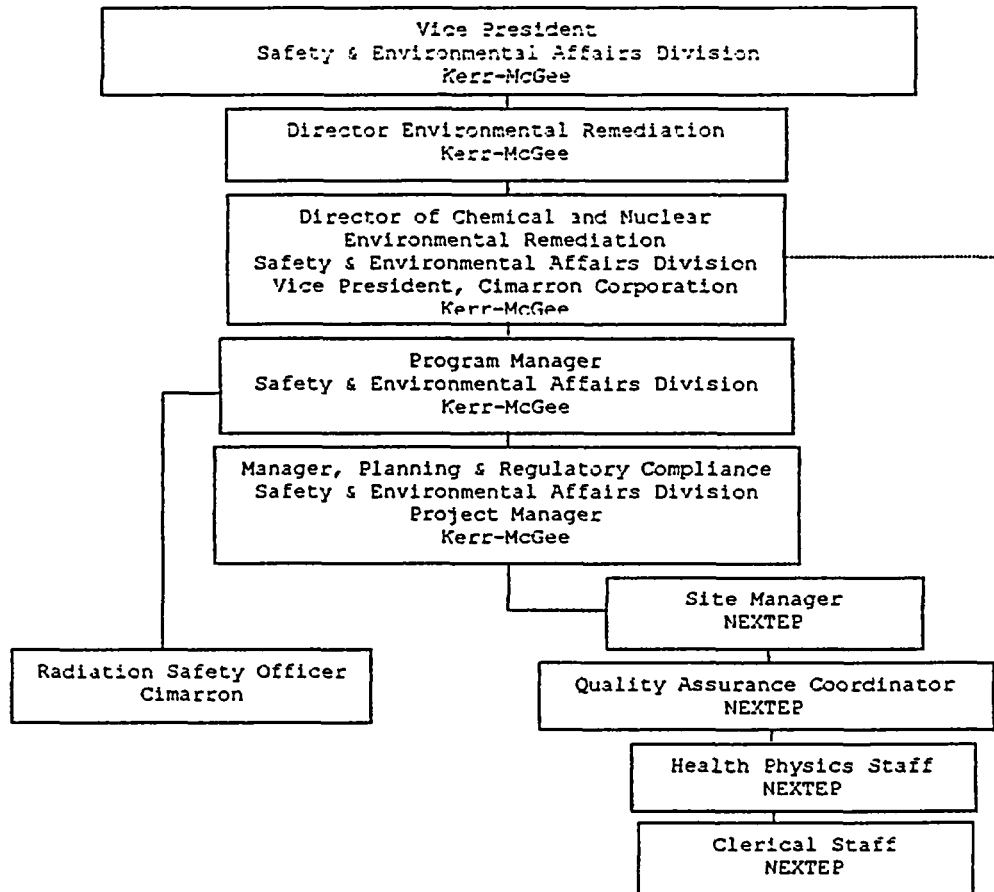


Figure 3-1

**Kerr-McGee Corporation
Safety & Environmental Affairs Division
(Cimarron)**



9.0 SPECIAL WORK PERMITS

9.1 Section Overview

A Special Work Permit (SWP) is a document or series of documents prepared by the Activity Supervisor, with input and approval from appropriate departments (i.e., Health Physics, Quality Assurance), as necessary, to inform individuals of the radiological and non-radiological conditions that exist in the work area and the safety requirements for the job. The ALARA review process is an integral part of the SWP process and is performed prior to completing a SWP.

~~Deleted: Project Manager~~

SWP's are required when hazardous or radioactive materials are present in quantities that could result in health hazards due to the work to be performed. Cimarron does not intend for a SWP to be automatically required whenever work is performed in a restricted area. However, radiation work shall require a SWP when it is performed in posted Radiation Areas, and Airborne Radioactivity Areas. Work performed in posted Radioactive Materials Areas may or may not require an SWP, depending on the type of work to be performed. For example, maintenance activities such as clean oil changes, light bulb changes, equipment maintenance, lawn mowing, site tours, management inspections, environmental monitoring and measurements, work with check sources, and security patrols shall not normally be performed under the controls of a SWP. These types of activities are routine activities and past experience has demonstrated that they are not a source of dose to participants. Activities such as contaminated earth-moving, placement of materials in the disposal cell, decontamination of buildings and equipment, and work that could generate contaminated airborne material shall be performed under the direction of a SWP.

9.2 SWP Preparation

SWP documentation shall consider all safety and radiological hazards and protective equipment needed for the project. SWPs should include information on the nature of the work, equipment needed to perform the job, work procedures, safety requirements, necessary surveys, training requirements, and records to be maintained. A man-hour estimate and dose estimate shall be performed for each SWP. Evaluations are performed based upon the above documentation, and the SWP requirements shall be written to incorporate all health and safety considerations.

9.3 SWP Requirements

The SWP job description shall be consistent with the activities or task to be performed. Personnel monitoring requirements, radiological survey requirements, and health physics oversight requirements shall be written onto the SWP. In

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addition, any special sampling requirements, such as air sampling, shall be included as SWP requirements. The location identified on the SWP shall be consistent with the work being performed. The SWP shall be posted on the SWP Bulletin Board and/or at the job site. The job Activity Supervisor shall review the provisions of specific SWPs with their workers prior to work starting.

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9.4 SWP Approval

The Radiation Safety Officer, or designee, shall approve all SWPs.

9.5 SWP Training

Each individual who performs work governed by a SWP shall receive training regarding the SWP. SWP training shall be documented by having the worker sign a form acknowledging that training was received.

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12.0 CONTAMINATION CONTROL

12.1 Section Overview

The purpose of contamination control is to prevent and/or minimize the spread of contamination to individuals, areas, and equipment. Control of radioactive surface contamination minimizes possible inhalation or ingestion of radioactivity by personnel, skin dose from small particles of radioactivity, and the spread to or build-up of radioactivity in the facility or environment from decommissioning operations.

12.2 General

Cimarron shall maintain restricted areas of the facility, equipment, below the smearable contamination limit of 5,000 dpm/100cm² gross alpha. In addition, Cimarron shall establish Contaminated Area control, including posting, whenever smearable contamination in an area exceeds 1,000 dpm/100cm². Cimarron shall incorporate the ALARA philosophy when selecting decontamination methods and practices.

As a general rule, decontamination should be performed by working from areas of low contamination to areas of high contamination. Decontamination materials should be limited to the minimum required for the task. All decontamination materials shall be collected, monitored, and properly dispositioned.

12.3 Control and Use of Radiological Containments

The Health Physics Department, along with Job Activity Supervisors, shall determine the need for a particular type of containment to control the spread of contamination.

Deleted: Supervisor

12.4 Contaminated Personnel

The performance of non-routine monitoring (e.g., contaminated personnel) shall be proceduralized. Decontamination of personnel shall be performed under the guidance of health physics personnel and shall incorporate good health physics practices and ALARA. Cimarron shall not allow an individual whose skin or personal clothing is found contaminated above background to exit a controlled area without prior approval of the Site Manager or RSO. Appropriate surveys and monitoring shall be performed to evaluate dose to the individual resulting from contamination.

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exposure ALARA. Consideration of both internal and external hazards shall be made when evaluating the need for respiratory protective equipment.

When respirators must be used, appropriate rest or relief periods shall be provided. An individual wearing a respirator may leave the work area at any time for relief in the event of equipment malfunction, physical or psychological distress, procedural or communication failure, significant deterioration of work area conditions, or any other condition that might require relief.

Cimarron Corporation is committed to establishing and maintaining a respiratory protection program consistent with the goal of protecting its employees. It is therefore the policy of this company that all employees, when using respirators in the workplace, or administering the Respiratory Protection Program, shall adhere to the principles established in the written procedures.

14.3 Engineering and Administrative Controls

Cimarron health physics and Activity Supervisor personnel evaluate all radiation work which could result in exposures to airborne radioactivity in accordance with Section 9.0, "Special Work Permits". This evaluation includes means to ensure that dose to workers is maintained ALARA. Engineering practices may include the use of vacuum systems discharging through HEPA filtration devices, dust suppression and control by wetting of surfaces and soils, washing down equipment and materials prior to handling, vacuuming of surfaces, and the use of tents, glove boxes, and hoods. Workers are trained to stand up-wind of work, perform surveys of work areas for airborne contaminants and loose surface contamination, and to perform work in open areas rather than in confined areas when practical. Other techniques will be used and implemented as necessary.

~~Deleted: supervisor~~

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Respirators shall be used to control personnel exposure to airborne radioactive materials when administrative and engineered controls are not practical or fully effective and the use of respirators result in Total Effective Dose Equivalent (TEDE) being ALARA. Administrative controls shall be used to limit personnel access to or time spent in an area requiring respiratory protective equipment. Engineered controls shall be used, to the extent practicable, to limit of airborne contaminants and to control airborne radioactive materials.

14.4 Determination of Respiratory Protection Requirements

An air sampling program sufficient to determine the potential hazards, permit proper equipment selection, and estimate exposures shall be established. Determination of respiratory protection requirements and selection of equipment for non-radiological contaminants shall be made by the RSO or designee.

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

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

Revision to Organizational Chart – Responsibilities and Titles – Sections 2, 3, 4, 5, 9, 12, 14, 1

Cal
9/30/03

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		No
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5.0 Comments:

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6.0 Performed By (Signature/Date):

Corporate Management:	<i>[Signature]</i>	Date: 09/30/03
Project Manager:	<i>[Signature]</i>	Date: 09/30/03
RSO:	<i>[Signature]</i>	Date: 9/30/03

7.0 Implemented By and Date:

Site Manager:	<i>[Signature]</i>	Date: 10/8/03
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Change Evaluation
ALARA Committee Approval of Revision to
Cimarron Annex A (Radiation Protection Plan)
September 30, 2003

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.

- Revisions to the Cimarron Organizational Chart.
- Revisions to facility titles and responsibilities.
- Revisions to Sections 2, 3, 4, 5, 9, 12, and 14 reflecting the above changes.
- Table of Contents page.
- Signature Page.

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 – *not applicable.*
 - 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 – *satisfied.*
 - c) The action must not violate training requirements – *not applicable.*
 - d) Revisions to the RPP must be approved by the ALARA Committee – *The required parties are required to 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 – *not applicable.*
 - b) Liquid and airborne effluents will not exceed 10 CFR 20, Appendix B limits – *This 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 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.*
 - b) The action must not impact the environment as evidenced by the environmental monitoring program – *It does not.*
 - c) The action must not create the potential for an accident worse than that assumed in the dose assessment – *It does not.*
 - d) The action must not result in an adverse socioeconomic impact to Cimarron and the surrounding community. – *It does not.*

- e) The action must not create other than short duration and minor impacts to air – *It does not.*
- f) The action must not change potential future land use – *It does not.*
- g) The action must not adversely impact transportation plans for shipments to a licensed disposal site – *It does not.*
- h) The action must not adversely impact endangered species – *Not applicable.*
- i) 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.

CIMARRON CORPORATION
RADIATION PROTECTION PLAN

REVIEWED BY: _____ **DATE:**
QUALITY ASSURANCE COORDINATOR

APPROVED BY: _____ **DATE:**
RADIATION SAFETY OFFICER

APPROVED BY: _____ **DATE:**
PROGRAM MANAGER

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APPROVED BY: _____ **DATE:**
PROJECT MANAGER

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APPROVED BY: _____ **DATE:**
VICE PRESIDENT/CIMARRON

ANNEX A

CIMARRON CORPORATION
RADIATION PROTECTION
PLAN

for
Cimarron Corporation former Nuclear Fuels Fabrication Facility
near Crescent, OK

SNM-928 Amendment #18
Approved by NRC May 28, 2002

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1.0 INTRODUCTION

1.1 Section Overview

This introductory section to the Cimarron Radiation Protection Plan (RPP) is intended as an orientation to the overall purpose and scope of the Plan.

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1.2 Purpose

The purpose of the Plan is to summarize the regulations and safety practices that apply to the radiological operations of Cimarron Corporation (Cimarron) and to establish Cimarron radiation protection policies. From these policies, specific procedures are developed to assure compliance with regulations and to maintain radiation exposures, resulting from decommissioning and related operations, to a level that is As Low As is Reasonably Achievable (ALARA). Cimarron Corporation shall comply with all applicable state and federal regulations, licenses, and permits during the decommissioning process.

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This Plan was initially developed in response to NRC comments (dated August 16, 1996) regarding the Cimarron License SNM-928 amendment request dated November 15, 1994. This Plan, otherwise known as Annex A to License SNM-928 supercedes the original Appendix A/Annex A in License Amendment #13.

The policies stated in this Plan are not intended to restrict Cimarron operations more than required by regulations. Wherever a policy is more restrictive than the regulations, the policy is intended only as a practical means of achieving regulatory compliance. Any variation from these policies or subordinate procedures must be approved by the RSO and documented.

Deleted: Unintentional or approved intentional variations from the policies established in this Plan and applicable procedures shall not be construed as a violation of the Cimarron radioactive material license as long as regulatory compliance is achieved. All operational variations to the Plan shall be approved by the Radiation Safety Officer (RSO) in writing.

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This RPP (Annex A) shall be reviewed at least annually by the ALARA Committee. The review will assess the effectiveness of the Plan in providing appropriate regulatory and radiation protection policy. The review will be documented and changes to the Plan will be made based upon the recommendations of the ALARA Committee.

1.3 Scope

The policies in this Plan apply to all routine and emergency radiological operations. All employees, contractors, and visitors are included within the scope of the policies in this Plan.

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2.0 GENERAL INFORMATION

2.1 Section Overview

This section provides requirements for radiation safety definitions, gives the responsibilities of those involved in Cimarron Corporation radiological operations, and discusses radiation safety training requirements.

2.2 Definitions

Definitions are required to ensure that individuals understand the requirements of the regulations and the RPP at Cimarron Corporation. Cimarron Corporation shall utilize regulatory definitions whenever possible, or may use definitions that are more restrictive than the regulatory definition. In addition, Cimarron Corporation uses definitions which are consistent with standard industry guideline documents.

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2.3 Responsibilities

Cimarron Corporation shall incorporate clearly defined responsibilities in the RPP. Each individual at Cimarron shares responsibility for their own radiation protection as well as for their co-workers and individual members of the public. Key responsibilities under the Radiation Protection Program are outlined below. Job specific responsibilities under the Radiation Protection Program shall be outlined in the Radiation Protection Program Procedures.

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The Vice President, Cimarron Corporation, provides corporate oversight of site activities of the Cimarron facility. The Vice President, Cimarron Corporation has ultimate responsibility for assuring that the RPP, at Cimarron Corporation is developed and implemented in a manner consistent with regulatory requirements and company policies. This responsibility is delegated to the Radiation Safety Officer.

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The Program Manager provides project oversight through the development of longer range goals and strategy and is responsible for administrative and long-term management of the Cimarron facility.

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The Manager of Planning and Regulatory Compliance functions as the Project Manager for the site. The Project Manager is responsible to provide sufficient resources to implement the Radiation Safety Program and to perform site activities. The Project Manager oversees site staff, monitors regulatory requirements, site activities, scheduling and budget status.

Deleted: here out known as Site Manager, is responsible for assuring that resources are allocated to the radiation protection program, that coordination between Supervisory personnel occurs, and that an effective response capability for emergency issues dealing with radioactive materials is maintained. The Site Manager also has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

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The Site Manager is responsible for daily site activities and oversees the site staff. The Site Manager has authority to stop work in the event that the health and safety

of workers or members of the public may be compromised or if a regulatory non-compliance may occur.

The ALARA Committee is responsible for reviewing, evaluating and approving the RPF and changes to the plan in accordance with License Condition 27(e), reviewing operations dealing with radioactive materials and radiological controls, and providing direction to the Radiation Safety Officer for decisions involving ALARA, methods of operations, and approving annual ALARA goals for the Cimarron Facility.

~~Radiation Protection Plan~~

The Radiation Safety Officer (RSO) is responsible for development, implementation, and oversight of the Radiation Protection Program. The RSO chairs the ALARA Committee and is responsible for bringing pertinent radiation protection and safety issues to the attention of the ALARA Committee. The RSO has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

The Quality Assurance Coordinator is responsible for assessments of the performance of work in compliance with requirements of the radiation protection program, for the maintenance and distribution of controlled documents, and for long-term storage of quality assurance documents after they are no longer required for operational purposes. The QA Coordinator has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

Each Activity Supervisor is responsible for the effective implementation of radiation protection procedures within their scope of activities. Each Activity Supervisor has authority to stop work in the event that the health and safety of workers or members of the public may be compromised or if regulatory non-compliance may occur.

~~Supervisor~~

~~Supervisor~~

Each worker is responsible for following regulatory requirements and Cimarron Corporation radiation protection procedures to the best of his/her ability and knowledge. These responsibilities include proper use of protective and personnel monitoring equipment, notifying management of any potential or real radiation hazards or improper practices, and maintaining his/her individual radiation exposure and that of others ALARA. All workers should be aware of and heed the instructions on the "Notice to Employees" (NRC Form 3).

~~employee~~

~~at Cimarron Corporation~~

Workers are requested to contact site management first regarding potential regulatory or license violations before contacting regulatory agencies. However, any worker who is not satisfied with the management response regarding the potential violation is encouraged to contact the regulatory agency for resolution of the concern.

~~Cimarron Corporation~~

~~employees~~

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2.4 Training Requirements and Policy

All persons who are permitted to enter the Cimarron Corporation restricted area shall receive information and training in radiation safety. The depth of the training will be commensurate with the potential radiation safety problems and will be in compliance with the requirements in 10 CFR 19 and 10 CFR 20. Cimarron may have several levels of training, such as visitor, escorted radiation worker, radiation worker, and health physics technician training. Each of the levels of training will ensure that individuals are:

- Aware that radioactive materials are present in the restricted areas;
- Informed regarding additional risks that may arise due to the anticipated exposure of the individual;
- Informed regarding precautions or procedures to minimize exposure to radioactive materials or radiation;
- Informed of the purpose and functions of protective devices and monitoring devices that will be used; and
- Informed regarding additional protection available for the embryo/fetus, as applicable.

Training for radiation workers will include:

- Applicable provisions of the regulations and licenses for the protection of personnel from exposure to radiation or radioactive materials;
- Responsibility of the worker to report promptly to the site manager any conditions that may lead to or cause a violation of regulations or licenses or unnecessary exposure to radioactive material or radiation.
- Appropriate responses to warnings made in the event of any unusual occurrence or malfunction that may involve exposure to radiation or radioactive material; and
- Radiation exposure reports that may be requested by the worker pursuant to the regulations.

The Radiation Safety Officer is responsible for training of workers. Visitor training requirements are approved by the RSO, but may be administered by radiation workers.

The radiation training program may meet these requirements by using any of the following techniques: Classroom training, videotapes, reading assignments, on-the-job training, demonstrations, drills, and discussions. Radiation workers attend an appropriate classroom training session upon employment and receive periodic review training at least annually. Training records for all individuals shall be maintained in accordance with the Quality Assurance Plan.

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3.0 ADMINISTRATION

3.1 Section Overview

This section describes the administration of Cimarron Corporation's Radiation Protection Program. Administration of the Radiation Protection Program requires coordination between the Radiation Safety Officer, Site Manager, Quality Assurance Coordinator, Activity Supervisors, the ALARA Committee, and workers. Organization and staffing requirements of the Radiation Protection organization are presented, as well as the requirements of the ALARA Committee. Relationships between documents used to achieve compliance with the regulations and Cimarron Corporation's radioactive materials licenses are presented.

Compliance with the Radiation Protection Program policies is achieved through the implementation of procedures. Requirements for the development, review, approval, and control of procedures are also provided.

The Radiation Protection Program results in the generation of documents and records. In addition, notifications and reports are required by the regulations. Requirements for proper generation, storage, and turnover of documents and notifications are described to ensure regulatory compliance.

3.2 Radiation Protection Organization

The current organizational structure for Cimarron Corporation is presented in Figure 3-1. Radiation Protection staffing levels shall be maintained in consistency with current and planned activities. Duties and responsibilities that are required for health physics procedure shall be clearly defined.

3.3 Radiation Protection Program Document Hierarchy

Hierarchy of the Radiation Protection Program documents shall be as follows:

Federal and State Regulations (e.g., 10 CFR)

Radioactive Materials Licenses and Permits issued by the Nuclear Regulatory Commission, other Federal offices, and the State of Oklahoma, including all documents incorporated by reference, such as the Cimarron Corporation RPP.

Radiation Protection Program Procedures. These procedures shall administer and implement the RPP.

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~~3.4. Radiation Protection Program Manuals§~~
~~Deleted: The Radiation Protection Program shall be specifically defined and implemented using administrative and/or implementing procedures. Administrative procedures contain the policies, regulatory requirements, and administrative guidelines that will be used in the Radiation Protection Program. Implementing procedures contain specific information for achieving the requirements found in the Radiation Protection Plan or in the administrative procedures. §~~
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3.5 Procedure Development

Radiation Protection Program Procedures shall be developed in accordance with the Quality Assurance Plan. In addition, procedures shall be prepared in accordance with regulatory requirements and the RPP and should incorporate applicable technical guidance documents (e.g., ICRP, NCRP, U.S. NRC Regulatory Guides, ANSI Standards, ASME Standards, etc.).

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Radiation Protection Plan~~

3.6 Procedure Review, Approval, and Control

Procedures shall undergo technical verification and review to ensure compliance with regulatory requirements, all applicable licenses and permits, the RPP, and conformance, to the extent practicable, with applicable technical guidance documents. Procedure review shall also assure compatibility with all other Cimarron Corporation procedure manuals and documents. Reviews shall ensure that the procedure can be performed as written and that responsibilities are clearly defined and consistent with position descriptions. Review of procedures shall be performed by the Quality Assurance Coordinator, and the Radiation Safety Officer. All Radiation Protection Program procedures shall be approved by the Radiation Safety Officer. Procedures shall be issued and controlled by the Quality Assurance Coordinator in accordance with the Quality Assurance Plan.

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Radiation Protection Plan~~

3.7 Radiation Protection Program Documentation

Implementation of the Radiation Protection Program results in generation of documents demonstrating the quality of services performed and compliance with federal and state regulations. Radiation Protection documents shall be controlled in accordance with regulatory requirements and the requirements of the Quality Assurance Plan.

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3.8 Notifications and Reports

Notifications and reports shall be made in accordance with the requirements of 10 CFR 19, 10 CFR 20, 10 CFR 21, and 10 CFR 70.

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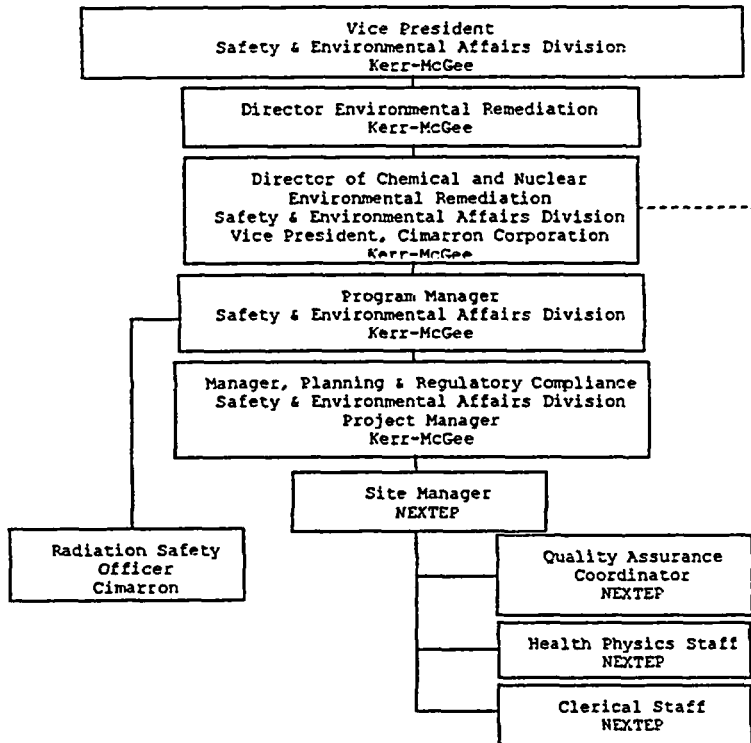
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**Kerr-McGee Corporation
Safety & Environmental Affairs Division
(Cimarron)**



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4.0 ALARA PROGRAM

4.1 Section Overview

Regulations in 10 CFR 20 require that Cimarron develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities. In addition, the regulations require Cimarron to use, to the extent practicable, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable. In order to comply with the regulations and to ensure a safe and healthy environment for workers and members of the public, Cimarron operations shall be performed in a manner such that doses are maintained ALARA.

4.2 ALARA Policy

Cimarron Corporation operations shall be performed in a manner such that doses are maintained As Low As is Reasonably Achievable (ALARA). The basic philosophy of radiation protection is to maintain radiation exposures ALARA below the regulatory requirements. "Reasonable" means that the costs, benefits, and risks are considered in trying to minimize dose.

In accordance with the Code of Federal Regulations, Cimarron Corporation has developed, documented, and implemented a radiation protection program commensurate with the scope and extent of licensed activities. The Cimarron Radiation Protection Program embraces the ALARA philosophy through its use, to the extent practicable, of procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are ALARA. Cimarron is committed to providing all necessary resources, in the form of personnel, training, engineering controls, preparation and planning, design, equipment, monitoring devices, and controls to achieve ALARA doses at its facility.

Each worker is expected to be knowledgeable of work activities, and to abide by all ALARA requirements such as those found on Special Work Permits. In addition to the responsibility for their own dose minimization, each worker is responsible for minimizing dose to other workers and members of the public. Cimarron Corporation has an ALARA Suggestion Program for workers to provide comments and suggestions for dose minimization and improving the safety and efficiency of

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operations. Cimarron Corporation encourages worker participation in the ALARA Suggestion Program.

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4.3 ALARA Committee

Cimarron shall have an ALARA Committee whose purpose is to ensure that ALARA policy, philosophy, commitments and regulatory requirements are integrated into all appropriate work activities.

The responsibilities of the ALARA Committee are:

- Ensuring that ALARA policy, philosophy, commitments, and regulatory requirements are integrated into all appropriate work activities.
- Reviewing and approving ALARA Program goals for Cimarron Corporation.
- Reviewing the effectiveness of the ALARA Program.
- Reviewing plans for activities to ensure that ALARA considerations are met.
- Annual review of the Radiation Protection Program Policy to ensure compliance and to incorporate any necessary changes.
- Evaluate and approve changes to the Decommissioning Plan or RPP in accordance with License Condition 27(e).

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The ALARA committee shall be chaired by the RSO. The Vice-Chair shall be the Cimarron Project Manager. Other individuals with appropriate authority and technical expertise shall serve on the committee as deemed necessary by the Chair or Vice-Chair.

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5.0 ASSESSMENTS

5.1 Section Overview

Audits and surveillances (assessments) of the Cimarron Radiation Protection Program provide a systematic approach to the review of key activities and the overall quality of radiation protection activities. These assessments help to assure that current program activities comply with license and regulatory requirements, program activities are performed in accordance with established policies, procedures and recognized good practices, unsatisfactory performance is identified and corrected, and any programmatic weaknesses are targeted and corrected. The assessment process includes continuous performance monitoring throughout the year.

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5.2 Corporate Audits

Periodic Corporate Audits shall be used to evaluate the effectiveness of selected aspects of the Radiation Protection Program and to determine the adequacy of and adherence to established procedures, instructions, specifications, regulations and standards, and other applicable permitting and licensing requirements. Audits shall be conducted by the Kerr-McGee Corporate Auditor or designee.

5.3 Surveillances

Surveillances are job specific observations performed by Health Physics or Quality Assurance personnel to evaluate the implementation of the radiation protection program with respect to accepted practices (e.g., procedures, management directives, etc.), industry standards, and regulatory requirements.

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5.4 Radiological Occurrence Reports

A Radiological Occurrence Report (ROR) is generated to document the facts, record the apparent and/or root cause, track the resolution and aid in trending radiological events. RORs are issued in accordance with the Quality Assurance Plan.

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9.0 SPECIAL WORK PERMITS

9.1 Section Overview

A Special Work Permit (SWP) is a document or series of documents prepared by the Activity Supervisor, with input and approval from appropriate departments (i.e., Health Physics, Quality Assurance), as necessary, to inform individuals of the radiological and non-radiological conditions that exist in the work area and the safety requirements for the job. The ALARA review process is an integral part of the SWP process and is performed prior to completing a SWP.

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SWP's are required when hazardous or radioactive materials are present in quantities that could result in health hazards due to the work to be performed. Cimarron does not intend for a SWP to be automatically required whenever work is performed in a restricted area. However, radiation work shall require a SWP when it is performed in posted Radiation Areas, and Airborne Radioactivity Areas. Work performed in posted Radioactive Materials Areas may or may not require an SWP, depending on the type of work to be performed. For example, maintenance activities such as clean oil changes, light bulb changes, equipment maintenance, lawn mowing, site tours, management inspections, environmental monitoring and measurements, work with check sources, and security patrols shall not normally be performed under the controls of a SWP. These types of activities are routine activities and past experience has demonstrated that they are not a source of dose to participants. Activities such as contaminated earth-moving, placement of materials in the disposal cell, decontamination of buildings and equipment, and work that could generate contaminated airborne material shall be performed under the direction of a SWP.

9.2 SWP Preparation

SWP documentation shall consider all safety and radiological hazards and protective equipment needed for the project. SWPs should include information on the nature of the work, equipment needed to perform the job, work procedures, safety requirements, necessary surveys, training requirements, and records to be maintained. A man-hour estimate and dose estimate shall be performed for each SWP. Evaluations are performed based upon the above documentation, and the SWP requirements shall be written to incorporate all health and safety considerations.

9.3 SWP Requirements

The SWP job description shall be consistent with the activities or task to be performed. Personnel monitoring requirements, radiological survey requirements, and health physics oversight requirements shall be written onto the SWP. In

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addition, any special sampling requirements, such as air sampling, shall be included as SWP requirements. The location identified on the SWP shall be consistent with the work being performed. The SWP shall be posted on the SWP Bulletin Board and/or at the job site. The job Activity Supervisor shall review the provisions of specific SWPs with their workers prior to work starting.

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9.4 SWP Approval

The Radiation Safety Officer, or designee, shall approve all SWPs.

9.5 SWP Training

Each individual who performs work governed by a SWP shall receive training regarding the SWP. SWP training shall be documented by having the worker sign a form acknowledging that training was received.

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12.0 CONTAMINATION CONTROL

12.1 Section Overview

The purpose of contamination control is to prevent and/or minimize the spread of contamination to individuals, areas, and equipment. Control of radioactive surface contamination minimizes possible inhalation or ingestion of radioactivity by personnel, skin dose from small particles of radioactivity, and the spread to or build-up of radioactivity in the facility or environment from decommissioning operations.

12.2 General

Cimarron shall maintain restricted areas of the facility, equipment, below the smearable contamination limit of 5,000 dpm/100cm² gross alpha. In addition, Cimarron shall establish Contaminated Area control, including posting, whenever smearable contamination in an area exceeds 1,000 dpm/100cm². Cimarron shall incorporate the ALARA philosophy when selecting decontamination methods and practices.

As a general rule, decontamination should be performed by working from areas of low contamination to areas of high contamination. Decontamination materials should be limited to the minimum required for the task. All decontamination materials shall be collected, monitored, and properly dispositioned.

12.3 Control and Use of Radiological Containments

The Health Physics Department, along with Job Activity Supervisors, shall determine the need for a particular type of containment to control the spread of contamination.

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12.4 Contaminated Personnel

The performance of non-routine monitoring (e.g., contaminated personnel) shall be proceduralized. Decontamination of personnel shall be performed under the guidance of health physics personnel and shall incorporate good health physics practices and ALARA. Cimarron shall not allow an individual whose skin or personal clothing is found contaminated above background to exit a controlled area without prior approval of the Site Manager or RSO. Appropriate surveys and monitoring shall be performed to evaluate dose to the individual resulting from contamination.

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12.5 Spill of Radioactive Material

A spill of radioactive material requires immediate actions which include stopping the spill, warning other personnel, isolating the area, and minimizing radiation exposure. Supplementary actions should include the performance of radiological surveys in immediate and adjacent areas, including downwind.

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14.0 RESPIRATORY PROTECTION

14.1 Section Overview

Respiratory protection measures shall be employed when necessary to protect workers from a variety of airborne hazards. The hazards may be of a radiological or non-radiological nature. The respiratory protection program shall meet the requirements found in 10 CFR 20, Subpart H, "Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas" for radiological hazards and the Code of Federal Regulations Title 29 Part 1910.134 for non-radiological hazards.

The Respiratory Protection Program shall include the following elements as required by NUREG-0041, "Manual of Respiratory Protection Against Airborne Radioactive Material":

- Written standard operating procedures and policy statement;
- Proper selection of equipment, based on the hazard;
- Proper training and instruction of users;
- Proper fitting, use, cleaning, storage, inspection, quality assurance, and maintenance of equipment;
- Appropriate surveillance of work conditions, degree of employee exposure to stress;
- Regular inspection and evaluation to determine the continued program effectiveness;
- Program responsibility vested in one qualified individual;
- An adequate medical surveillance program for respirator users;
- Use of only Bureau of Mines/National Institute of Occupational Safety and Health (NIOSH) certified equipment; and
- Maintenance of a bioassay program.

Respiratory Protection Program requirements shall only apply when respiratory protection devices are called for due to the work to be performed and shall be implemented prior to and during use of respiratory protection equipment.

14.2 Respiratory Protection Policy Statement

It is Cimarron Corporation policy to maintain personnel exposure to both internal and external hazards as low as is reasonably achievable (ALARA). Personnel exposure to airborne contaminants shall be limited by process and engineered controls whenever possible. However, under some conditions, process and engineered controls may not be feasible or provide adequate assurance that exposure to contaminants will be maintained ALARA. In such instances, respiratory protection devices may be required for individuals performing work in areas containing airborne contaminants if the use of the equipment maintains overall

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exposure ALARA. Consideration of both internal and external hazards shall be made when evaluating the need for respiratory protective equipment.

When respirators must be used, appropriate rest or relief periods shall be provided. An individual wearing a respirator may leave the work area at any time for relief in the event of equipment malfunction, physical or psychological distress, procedural or communication failure, significant deterioration of work area conditions, or any other condition that might require relief.

Cimarron Corporation is committed to establishing and maintaining a respiratory protection program consistent with the goal of protecting its employees. It is therefore the policy of this company that all employees, when using respirators in the workplace, or administering the Respiratory Protection Program, shall adhere to the principles established in the written procedures.

14.3 Engineering and Administrative Controls

Cimarron health physics and Activity Supervisor personnel evaluate all radiation work which could result in exposures to airborne radioactivity in accordance with Section 9.0, "Special Work Permits". This evaluation includes means to ensure that dose to workers is maintained ALARA. Engineering practices may include the use of vacuum systems discharging through HEPA filtration devices, dust suppression and control by wetting of surfaces and soils, washing down equipment and materials prior to handling, vacuuming of surfaces, and the use of tents, glove boxes, and hoods. Workers are trained to stand up-wind of work, perform surveys of work areas for airborne contaminants and loose surface contamination, and to perform work in open areas rather than in confined areas when practical. Other techniques will be used and implemented as necessary.

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Respirators shall be used to control personnel exposure to airborne radioactive materials when administrative and engineered controls are not practical or fully effective and the use of respirators result in Total Effective Dose Equivalent (TEDE) being ALARA. Administrative controls shall be used to limit personnel access to or time spent in an area requiring respiratory protective equipment. Engineered controls shall be used, to the extent practicable, to limit of airborne contaminants and to control airborne radioactive materials.

14.4 Determination of Respiratory Protection Requirements

An air sampling program sufficient to determine the potential hazards, permit proper equipment selection, and estimate exposures shall be established. Determination of respiratory protection requirements and selection of equipment for non-radiological contaminants shall be made by the RSO or designee.

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14.5 Selection of Respiratory Devices

Respiratory protection device selection shall consider all hazards and working conditions and shall incorporate ALARA philosophy. Respiratory protective equipment shall provide a protection factor (in accordance with Appendix A to 10 CFR 20) which is greater than the multiple by which peak concentrations of radioactive material in the working area are expected to exceed the Derived Air Concentration given in Table 1, Column 3 of Appendix B to 10 CFR 20. If the selection of a respiratory protection device with a protection factor greater than the peak concentration is inconsistent with the goal of keeping the total effective dose equivalent (TEDE) ALARA, equipment with a lower protection factor may be selected when the equipment will result in keeping the TEDE ALARA.

In the event of an emergency requiring the use of respiratory protective equipment, Cimarron shall use equipment that has been specifically certified or had certification extended for emergency use by NIOSH/MSHA.

14.6 Facial Hair Policy

Individuals using tight-fitting respirators shall not have any facial hair that interferes with the sealing surface of the respirator.

14.7 Medical Requirements

A medical examination (physical) shall be performed by a physician on all personnel who will use respiratory protection equipment in the course of work. The physical shall be performed prior to the wearing of any respiratory protection device. Physical examinations shall be required at least annually (every 12 months) for personnel who wear respirators. Respirator users shall be medically evaluated to ensure they possess the physical and psychological capabilities necessary to perform tasks while wearing a respirator. This medical evaluation shall use Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection" as guidance in determining if an individual is medically qualified to wear respiratory protection equipment.

14.8 Training

Training in the proper use and maintenance of respiratory protective equipment shall be provided annually to all users of the equipment. Personnel shall be instructed that cartridges and filters are to be changed when necessary due to dust loading which results in difficulty in breathing or increased levels of contamination on the cartridge. Personnel shall also be trained regarding Cimarron Corporation policies that address relief from respiratory or other stress caused by the wearing of respiratory protective equipment.

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14.9 Respirator Fit Testing

Respirators with a tight-fitting face piece shall be fit tested to each individual to verify that an adequate seal can be obtained. The fit-testing shall be performed prior to first use for all users and shall be repeated at a frequency not to exceed 12 months. Fit-testing shall be performed only on individuals who have a current medical approval, received respiratory protection training within the past year and are clean shaven. Respirators shall be tested for operability by the user (e.g., negative pressure test for full face respirators) immediately prior to each use.

14.10 Respirator Maintenance

Respirators shall be cleaned and disinfected after each use. Respirators shall be inspected after each cleaning and necessary maintenance shall be performed. Respirators shall be stored in clean sanitary conditions. Respirators ready for issue shall be free of significant smearable and fixed surface contamination.

14.11 Corrective Lenses

Personnel requiring corrective lenses when wearing a full-face respirator shall wear prescription eye glasses approved for use inside a full-face respirator or contact lenses.

14.12 Supplied Breathing Air

All sources of breathing air shall meet the requirements for Grade D breathing air as specified in ANSI/CGAG-7.1 - 1989, "Commodity Specification for Air." Fittings to supplied air systems manifolds and cylinders shall be unique such that the introduction of gases other than pure breathing air is prohibited. Sources of breathing air shall be approved by the RSO.

14.13 Bioassay

Personnel bioassay results shall be used to verify the respiratory protection program's effectiveness for selection of adequate respiratory protection devices and provision of properly functioning respiratory protection devices.

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