

November 21, 2018

Chief, Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611

Re: Cimarron Environmental Response Trust  
Proposed 2019 Budget – Rev 0

Dear Recipient:

Environmental Properties Management LLC (EPM) submits herein a proposed budget for 2019. EPM submits this proposed budget for calendar year 2019 to the beneficiaries and interested parties of the Cimarron Environmental Response Trust (the Trust). Work performed for the Trust has been broken down into six tasks. The following is a summary of the allocation of costs for each task by trust account:

- Task 1 – Administration activities will be funded exclusively by the Cimarron Trust Administrative Cost Account (“Administrative Account”)
- Task 2 – License Compliance activities will be funded exclusively by the Cimarron Trust Federal Environmental Cost Account (“Federal Account”)
- Task 3 – Federal Agency Fees will be funded exclusively by the Federal Account
- Task 4 – Site Decommissioning activities will be funded by both the Federal Account and the Cimarron Trust State Environmental Cost Account (State Account). The same allocation used in the past will be applied through 2017 (i.e., 93.2% of the costs will be paid out of the Federal Account and 6.8% of the costs will be paid out of the State Account).
- Task 5 – State Agency Fees will be funded exclusively by the State Account
- Task 6 – Unanticipated Work will be funded by either the Federal Account, the State Account, or both, as agreed upon by the beneficiaries

The attached table provides a breakdown of the estimated cost for each task. Costs for labor, travel, and incidentals listed in pink-highlighted cells are for EPM labor and expenses. Costs shown in green-highlighted cells are for materials or services provided by outside vendors. Details on the scope of work assigned to each task are provided in the attached Scope of Work.

Should it become necessary to perform work outside the defined scope of work provided in this budget submittal (unanticipated work), EPM will submit a scope and cost estimate for the work and propose the allocation of cost from the Trust Accounts. EPM will then proceed with the work upon approval of the allocation of costs.

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Section 3.2.1 of the Trust Agreement requires the Trustee to project administrative expenditures for a three-year period. EPM expects administrative expenditures to remain essentially the same as projected from 2019 through 2021.

Attached to this letter please find the following:

- An executive summary
- The scope of work planned for 2019
- A spreadsheet itemizing estimated budgetary estimates by task and expense item category
- A breakdown of costs for vendors performing work under the License Compliance and Site Decommissioning tasks.

Your approval of this proposed budget is requested.

Please feel free to call me at (816) 822-3545, or Jeff Lux at (405) 642-5152 if you have questions regarding this proposed budget.

Sincerely,

Bill Halliburton, Trust Administrator

Attachments

cc: Robert Yalen, U.S. Department of Justice  
Andrea Koch, U.S. Nuclear Regulatory Commission  
Hollis Luzecky, U.S. Environmental Protection Agency  
Pam Dizikes, Oklahoma Department of Environmental Quality  
Clayton Eubanks, Office of the Attorney General of Oklahoma  
Ken Kalman, U.S. Nuclear Regulatory Commission  
Paul Davis, Oklahoma Department of Environmental Quality

## CIMARRON ENVIRONMENTAL RESPONSE TRUST 2019 BUDGET EXECUTIVE SUMMARY

The Cimarron Environmental Response Trust (CERT) is administered by Environmental Properties Management LLC (EPM) as Trustee. EPM submits the attached information for consideration for the period beginning January 1, 2019 through December 31, 2019. The attached estimates categorize expenses into the following “tasks”:

1. Administrative Costs
2. License Compliance
3. Federal Agency Fees
4. Site Decommissioning
5. State Agency Fees
6. Unanticipated Work

Costs for Task 1 will be paid out of the Cimarron Administrative Cost Account. Costs for Tasks 2 and 3 will be paid out of the Cimarron Federal Environmental Response Cost Account. As in the past, Costs for Task 4 will be allocated 93.2% to the Federal Account and 6.8% to the State Account. Costs for Task 5 will be paid out of the Cimarron State Environmental Response Cost Account. Costs for Task 6 will be paid out of one or more of the three accounts as agreed upon by the agencies upon assignment.

The following is a summary scope of work that is anticipated for 2018:

### A. Administration

- Pay taxes and utility bills and maintain the site office and Trust property.
- Submit quarterly financial reports.
- Conduct monthly status teleconferences.
- Maintain files and a document repository.

### B. License Compliance

- Maintain and implement radiation protection and quality assurance programs.
- Conduct ALARA Committee meetings.
- Conduct annual environmental monitoring.
- Participate in NRC inspections.

### C. Site Decommissioning

- Respond to requests for additional information related to *Facility Decommissioning Plan – Rev 1*.
- Advance 90% design documents for groundwater remediation infrastructure and water treatment facilities to “Issue for Bid”.
- Conduct a treatability test for a new resin.
- Prepare requests for bids for fabrication, construction, and installation of groundwater remediation infrastructure and water treatment facilities.
- Evaluate bids and document basis for selection of vendors.

## CIMARRON ENVIRONMENTAL RESPONSE TRUST 2019 SCOPE OF WORK

### Introduction

The following scope of work for each task describes the administrative, license compliance, and decommissioning activities that are planned to be performed in 2019. Tasks involving the payment of agency fees are only included to specify which Trust accounts will fund payment of those fees.

### Task 1 – Administration

Administration involves the financial maintenance of Trust accounts, the physical maintenance of the site and site office, and legal expenses associated with the administration of the Trust. All costs for administration will be paid out of the Cimarron Trust Administrative Account (“Administrative Account”). Activities covered under Task 1, Administration, include, but are not limited to:

1. Provide quarterly financial reports on the financial status of each of the Trust accounts.
2. Pay taxes, utilities, etc.
3. Maintain the office and procure the supplies and facilities needed to maintain and operate the office.
4. Execute contracts and work orders for site maintenance and oversight activities.
5. Maintain electronic and hard copy files and the document repository for the Trust.
6. Conduct and distribute notes on periodic project status teleconferences.

### Task 2 – License Compliance

The License Compliance task includes the implementation of activities required by license SNM-928. All costs for license compliance will be paid out of the Cimarron Trust Federal Environmental Cost Account (“Federal Account”). Activities covered under Task 2, “License Compliance” include, but are not limited to, the following:

1. Implement the ALARA program.
2. Maintain the radiation protection (RP) and quality assurance (QA) programs and revise the RPP, QAPP, and associated procedures as needed.
3. Revise the Sampling and Analysis Plan (SAP) and associated procedures as appropriate.
4. Provide RP and QA support for activities performed on site (e.g., groundwater sampling).
5. Conduct annual environmental sampling in accordance with the RPP.
6. Develop procedures related to sample collection and analysis and data review and evaluation related to the nuclear material control and accountability program.
7. Develop procedures related to the sampling and analysis, packaging, storage, manifesting, and shipping of low level radioactive waste. This includes spent resin and other potentially impacted material for which release survey is not practical.
8. Respond to agency requests for information (RAIs) related to *Facility Decommissioning Plan – Rev 1*.
9. Attend NRC on-site inspections and participate in meetings with NRC during review of *Facility Decommissioning Plan – Rev 1*.

10. Perform probabilistic dose modeling using reasonable exposure scenarios and known uranium enrichment values to evaluate possible area-specific alternative derived concentration goal levels (DCGLs).

#### Task 3 – Federal Agency Fees

NRC costs for the oversight and inspection of the Cimarron decommissioning project will be paid out of the Federal Account.

#### Task 4 – Site Decommissioning

Site Decommissioning includes activities that lead to the completion of site decommissioning. Costs for site decommissioning will be paid out of both the Federal Account and State Accounts. Activities covered under Task 4, “Site Decommissioning”, include, but are not limited to:

1. Perform project management and coordination for and between outside vendors involved in the final designs and specifications.
2. Advance design documents for groundwater remediation infrastructure and water treatment facilities to 90% and “Issue for Bid”.
3. Develop procedures related to sample collection and analysis and data review and evaluation related to in-process groundwater monitoring, discharge monitoring and reporting, and treated water injection.
4. Develop procedures related to sample collection and analysis and data review and evaluation related to the water treatment systems.
5. Prepare requests for bids for fabrication, construction, and installation of groundwater remediation infrastructure and water treatment facilities. Evaluate bids and document basis for selection of vendors.
6. Conduct a treatability test for Ambersep 21K<sup>®</sup>, the resin which has replaced the former Dow product Dowex 1<sup>®</sup>.
7. Prepare responses to agency RAIs related to *Facility Decommissioning Plan – Rev 1*.
8. After receipt of RAIs, abandon monitor wells listed in Table 9-1 of *Facility Decommissioning Plan – Rev 1*.
9. After receipt of RAIs, perform assessment of vertical distribution of uranium and/or nitrate at alluvial extraction well locations and install all extraction and injection wells not constructed within trenches, as proposed in *Facility Decommissioning Plan – Rev 1*.
10. After receipt of RAIs, install all new monitoring wells proposed in *Facility Decommissioning Plan – Rev 1*.
11. Participate in meetings involving NRC, DEQ, EPM, and decommissioning consultants and/or contractors.

The intent of items 7 - 9 above is to reduce the number of concurrent tasks being performed simultaneously during construction of full-scale remediation infrastructure. This work will only be performed if RAIs do not require the relocation of extraction, injection, or monitor wells. The costs for Task 4 will be allocated at 93.2% to the Federal Account and 6.8% to the State Account.

Task 5 – State Agency Fees

DEQ costs for the oversight of the Cimarron decommissioning project will be paid out of the State Account.

Task 6 – Unanticipated Work

Should it become necessary for the Trustee to perform work outside this Scope of Work (unanticipated work), EPM will submit a scope of work and cost estimate and propose an allocation of the costs from the Trust Accounts. EPM will proceed with the work upon approval of the scope of work and the allocation of costs by the NRC and/or the DEQ.

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**CIMARRON ENVIRONMENTAL RESPONSE TRUST  
2019 PROPOSED BUDGET - REVISION 0**

Task No.	Task Description					REIMBURSABLE EXPENSES					
		Category	Hourly Rate	Hours	Cost	Item	Quantity	Unit	Cost per Unit	Total Cost	
1	Administration	Associate (15)	\$239.00	268	\$64,052	Burns & McDonnell Support	1	Lump	\$30,000	\$30,000	
		Associate (22)	\$204.00	548	\$111,792	Office Expense	12	Mo	\$2,000	\$24,000	
		Travel & Incidentals			\$5,000	Utilities	15	Mo	\$700	\$10,500	
			Taxes	1	Lump	\$8,000	\$8,000				
			Site Maintenance	1	Lump	\$40,000	\$40,000				
			Legal Expenses	1	Lump	\$10,000	\$10,000				
			Document Management & Shipping	1	Lump	\$1,000	\$1,000				
Task Subtotals				816	\$180,844				\$123,500		
Task Total										\$304,344	
2	License Compliance	Associate (15)	\$239.00	66	\$15,774	Burns & McDonnell Support	1	Lump	\$60,000	\$60,000	
		Associate (22)	\$204.00	372	\$75,888	Enercon Support	1	Lump	\$387,000	\$387,000	
		Travel & Incidentals			\$3,000	Monitor Well Access	1	Lump	\$8,000	\$8,000	
			Lab Analysis	34	each	\$300	\$10,200				
			Field Supplies	34	Lump	\$40	\$1,360				
Task Subtotals				438	\$94,662				\$466,560		
Task Total										\$561,222	
3	Federal Agency Fees					NRC Fees	1	Lump	\$600,000	\$600,000	
Task Subtotals				0	\$0					\$600,000	
Task Total										\$600,000	
4	Site Decommissioning Federal Account - \$4,698,320 State Account - \$342,796	Associate (15)	\$239.00	426	\$101,814.00	Burns & McDonnell Support	1	Lump	\$1,723,000	\$1,723,000	
		Associate (22)	\$204.00	936	\$190,944	Enercon Support	1	Lump	\$155,000	\$155,000	
		Travel & Incidentals			\$12,000	Veolia Support	1	Lump	\$1,347,000	\$1,347,000	
			Lab Analysis (2 targeted events)	100	each	\$100	\$10,000				
			Well Access	2	each	\$8,000	\$16,000				
			Surveyor	1	Lump	\$5,000	\$5,000				
			Sampling Expense	100	each	\$40	\$4,000				
Task Subtotals				1362	\$304,758				\$3,260,000		
Task Total										\$3,564,758	
5	State Agency Fees					DEQ Fees	1	Lump	\$70,000	\$70,000	
Task Subtotals				0	\$0					\$70,000	
Task Total										\$70,000	
6	Out of Scope Work	Associate (15)	\$239.00	8	\$1,912						
		Associate (22)	\$204.00	40	\$8,160	Subcontractor	1	Lump	\$50,000	\$50,000	
		Travel & Incidentals			\$4,915	Other Expenses	1	Lump	\$20,000	\$20,000	
Task Subtotals				48	\$14,987					\$70,000	
Task Total										\$84,987	
Total Estimated Budget					\$595,251						\$5,185,311

CIMARRON ENVIRONMENTAL RESPONSE TRUST  
BREAKDOWN OF COSTS FOR PROPOSED 2019 BUDGET  
TASKS 2 AND 4

This breakdown of costs describes scopes of work to be performed by vendors for the Cimarron Environmental Response Trust (CERT) during 2019. The following vendors will provide consulting, design or field services for Task 2, “License Compliance” or Task 4, “Site Decommissioning”:

- Burns & McDonnell Engineering Company (Burns & McDonnell)
- Veolia Nuclear Solutions (VNS), with subcontractor Veolia Water Technologies (VWT) and
- Enercon Services (Enercon)

This document provides a description of the primary categories of work that will be performed by each vendor under each task, as well as the approximate cost for each category of work.

**Task 2 – License Compliance**

Burns & McDonnell

1. Required Radiation Protection (RP) and Quality Assurance (QA) Training – \$12,000 – Provides funding for radiation worker or radiological orientation, QA program training, and refresher training for those who have already received training.
2. Data Review & Database Management – \$7,000 – Provides funding for qualitative review and validation of annual environmental data, with assignment of data qualifiers as needed, import of data into the CERT EQuIS database management system, and export of data.
3. Dose Model – \$41,000 – Provides funding to re-evaluate the concentration that would yield 25 mrem/yr. The 1998 *Decommissioning Plan – Groundwater Evaluation Report* calculated a concentration-to-dose factor of 1.83E-04 mrem/pCi based on assumed isotopic activities for uranium in groundwater at the Cimarron site. This factor was based on default conversion factors for each isotope taken from ICRP Publication 69. Due to the extended duration of remediation presented in *Facility Decommissioning Plan – Rev 1*, a dose model using equations from RESRAD, with site-specific input parameters, will be generated to determine if the 180 pCi/L release criterion for groundwater at the Cimarron site is excessively conservative.

*Total proposed budget for Burns & McDonnell License Compliance = \$60,000.*

Enercon Services

1. Project Reporting and Management - \$33,000 – Provides funding for Enercon project team meetings, coordination meetings with EPM, Burns & McDonnell and Veolia, project controls support, and monthly budget and schedule meetings.



2. RP Program Support – \$183,000 – Provides funding for implementation and revision of the radiation protection program, providing training on radiological orientation, radiation worker training, procedures, and instruments. It includes implementation of the instrumentation program, providing RP support for field activities, and preparation of procedures related to documenting nuclear material control and accountability and low level radioactive waste manifesting and disposal.
3. QA and Program and Licensing Support – \$111,000 – Provides funding for QA/QC support in implementation and revision of the quality assurance program, including providing training, maintaining training and task qualification records, and performing periodic observations and audits. It includes monitoring preparation of design and bid documents to maintain contractor compliance with the Cimarron QA program and review of radiological data.
4. Respond to Agency Requests for Additional Information (RAIs) - \$27,000 – Provides funding to respond to RAIs related to the acceptance review and/or the detailed technical review of *Facility Decommissioning Plan – Rev 1*.
5. NRC Inspections / Meetings – \$33,000 – Provides funding for the Quality Assurance Coordinator and Radiation Safety Officer (or designee) attendance at NRC inspections and/or site meetings, and to review/respond to license communications.

*Total proposed budget for Enercon License Compliance = \$387,000.*

#### **Task 4 – Site Decommissioning**

##### **Burns & McDonnell**

1. Project Controls, Reporting and Management - \$132,000 – Provides funding for Burns & McDonnell project team and NRC meetings, coordination meetings with EPM, Veolia and Enercon, overall project controls and scheduling support, and monthly budget and schedule meetings.
2. Groundwater Monitoring, Data Review & Report Preparation – \$16,000 – Provides funding for the review and import of groundwater sampling data and generation of a final update of quarterly groundwater sample data.
3. 90% Design Preparation – \$552,000 – Provides funding to advance civil, mechanical, process, electrical & instrumentation, and controls design to the 90% level, including development of specifications. These design documents will form the basis for request-for-bid packages.
4. Permitting - \$51,000 – Provides funding to update and obtain any permits required for construction and/or operation of groundwater remediation and water treatment, discharge, and injection. This also provides for coordination with utilities for water, electricity, communications, and internet service to the treatment facilities.

5. Respond to Agency RAIs - \$94,000 – Provides funding to respond to RAIs related to the acceptance review and/or the detailed technical review of *Facility Decommissioning Plan – Rev 1*.
6. Bid Package Preparation and Evaluation - \$356,000 – Provides funding to prepare and evaluate requests for bids for decommissioning system installation and construction (well installation and abandonment, civil construction, extraction and injection trench construction, injection skids, instrumentation, the pre-engineered WATF), and other aspects of groundwater remediation and treatment facilities. This includes initial (+/- 10%) and “best and final” bids. The preparation of the “best and final” request for bids, as well as development of a project execution plan, schedule, and budget, are included in case the decommissioning plan is approved before the proposed budget for 2020 is approved.
7. Vertical Aquifer Profiling/Delineation and Well Installation/Abandonment - \$522,000 – Provides funding for vertical profiling of uranium and/or nitrate and the subsequent installation of groundwater extraction wells, installation of new monitor wells, and abandonment of existing monitor wells, as proposed in *Facility Decommissioning Plan - Rev 1*. This work is planned to reduce the number of concurrent activities that would be performed during construction. This work will only be performed if RAIs do not require the relocation of extraction, injection, or monitor wells.

*Total proposed budget for Burns & McDonnell Site Decommissioning = \$1,723,000.*

#### Enercon Services

1. Project & Program Management – \$30,000 – Provides funding for reporting, action item tracking, assignment of personnel, tracking budget, and managing interfaces between contractors.
2. Groundwater Sampling & Field Support – \$65,000 – Provides funding for the collection of groundwater samples for two sampling events, should they be needed, and other field support that Enercon personnel provide, such as working with EPM subcontractors to clear paths to monitor wells and repairing damaged wells.
3. Procedure Development – \$45,000 – Provides funding for the preparation of procedures associated with collection and analysis of samples related to nuclear material control, resin and absorbent for packaging, waste manifesting, and activity plans and standard operating procedures related to RP for groundwater remediation and water treatment system monitoring. Revision of procedures may also be related to comments on *Facility Decommissioning Plan – Rev 1*.
4. Respond to Agency Requests for Additional Information (RAIs) - \$15,000 – Provides funding to respond to RAIs related to the acceptance review and/or the detailed technical review of *Facility Decommissioning Plan – Rev 1*.

*Total proposed budget for Enercon Site Decommissioning = \$155,000.*

Veolia Nuclear Services / Veolia Water Technologies

1. Project Management - \$88,000 – Provides funding for Veolia project team meetings, coordination meetings with EPM, Burns & McDonnell and Enercon, project controls support, and monthly budget and schedule meetings.
2. 90% Design for Uranium Treatment Systems, Resin Processing, and Treatment Facilities – \$536,000 – Provides funding to advance design for uranium treatment systems, resin processing systems, water treatment facilities, and the relocated Western Area Treatment Facility to the 90% level. This work should be completed by the end of 2018.
3. 90% Design for Bionitrification Systems – \$255,000 – Provides funding to advance design for bionitrification and biomass processing systems to the 90% level. ***This scope of work had not been included in the December 2017 proposed budget.*** Now that preliminary designs have been reviewed and approved, this work can also be completed this year. This work should be completed by the end of 2018.
4. Conduct Treatability Test (\$166,000) – EPM was recently notified that Dow no longer produces the Dowex 1® resin and has replaced it with its Ambersep 21K® resin (21K). The cost of this resin is approximately twice the cost as Dowex 1®. This proposed budget includes funding to conduct a treatability test to determine the absorption capacity of the new resin, and to revise the projected resin usage and cost for resin (and LLRW disposal costs).
5. Respond to Agency Requests for Additional Information (RAIs) - \$10,000 – Provides funding to respond to RAIs related to the acceptance review and/or the detailed technical review of *Facility Decommissioning Plan – Rev 1*.
6. Bid Package Preparation and Evaluation - \$292,000 – Provides funding to prepare and evaluate requests for bids for fabrication of the ion exchange skids, bionitrification system, spent resin processing system, and biomass processing system, and their installation in groundwater remediation and treatment facilities. It also includes procurement of tanks and connections, and the procurement and delivery of all ancillary equipment and materials for water treatment. This includes initial (+/- 10%) and “best and final” bids. The preparation of the “best and final” request for bids, as well as development of a project execution plan, schedule, and budget, are included in case the decommissioning plan is approved before the proposed budget for 2020 is approved.

*Total proposed budget for Kurion Site Decommissioning = \$1,181,000.*

CIMARRON ENVIRONMENTAL RESPONSE TRUST  
BREAKDOWN OF COSTS FOR PROPOSED 2019 BUDGET  
TASKS 2 AND 4

<b>Task 2 - License Compliance</b>		
<b>Vendor</b>	<b>Description</b>	<b>Cost</b>
<b>Burns &amp; McDonnell</b>	Required Rad & QA Training	\$12,000
	Data Review & Database Management	\$7,000
	Dose Model	\$41,000
	<b>TOTAL</b>	<b>\$60,000</b>
<b>Enercon Services</b>	Project Reporting and Management	\$33,000
	Radiation Protection Program Support	\$183,000
	Quality Assurance Program Support	\$111,000
	Respond to RAIs	\$27,000
	NRC Inspections / Meetings	\$33,000
	<b>TOTAL</b>	<b>\$387,000</b>

<b>Task 4 - Decommissioning Support</b>		
<b>Vendor</b>	<b>Description</b>	<b>Cost</b>
<b>Burns &amp; McDonnell</b>	Project Reporting and Management	\$132,000
	Groundwater Monitoring, Data Review & Report Preparation	\$16,000
	90% Design Preparation	\$552,000
	Permitting	\$51,000
	Respond to RAIs	\$94,000
	Bid Package Preparation and Evaluation	\$356,000
	Vertical Aquifer Profile/Delin. and Well Instal/Aband.	\$522,000
	<b>TOTAL</b>	<b>\$1,723,000</b>
<b>Enercon Services</b>	Project Management	\$30,000
	Groundwater Sampling & Field Support	\$65,000
	Procedure Development	\$45,000
	Respond to RAIs	\$15,000
	<b>TOTAL</b>	<b>\$155,000</b>
<b>Kurion / Veolia Nuclear Solutions / Veolia Water Technologies</b>	Project Reporting and Management	\$88,000
	90% Design for Uranium Treatment and Resin Processing Systems and Treatment Facilities	\$536,000
	90% Design for Bionitrification and Biomass Processing Systems	\$255,000
	Conduct Treatability Test	\$166,000
	Respond to RAIs	\$10,000
	Bid Package Preparation and Evaluation	\$292,000
	<b>TOTAL</b>	<b>\$1,347,000</b>