

Koch - Dodge City  
(Green file)

Everett Spellman  
04/15/04 02:10 PM

To: "Moore, Brian" <MooreB@kochind.com>  
cc: Katherine Dunn/Kdhe@Kdhe, Mostafa Kamal/Kdhe@Kdhe, "Stephen M. Richmond [SRICHMOND@bowditch.com] (E-mail)" <SRICHMOND@bowditch.com>, stone.andrear@epa.gov  
Subject: Revised Closure, Post-Closure, and Corrective Action Cost Estimate

Brian,

KDHE received KNC's April 8, 2004 electronic submittal of the revised cost estimate for closure, post-closure, and corrective action for the RCRA Part B Permit. KDHE generally concurs with your submittal with modifications.

Based on KNC's submittal, we agree that the electrochemical reduction unit costs should be removed from the itemized costs as requested by KNC. Additionally, sample collection labor and analytical costs were adjusted to include QA/QC samples and to correct the apparent calculation errors. KDHE's evaluation relied on the professional expertise and judgement of KDHE's Bureau of Water UIC staff concerning the operation and maintenance of underground injection control wells. A consensus was reached that the KNC's cost estimate for the disposal wells were insufficient, particularly in the area of well workover.

Please review the attached revised cost estimate. Following KNC's review, KNC should submit a hard copy of the cost estimate in the pending Part B Permit Application along with adequate financial assurance in instrument and amount. Should you have any questions or wish to meet to discuss the enclosed cost estimate, please contact me or Katherine Dunn.



KDHE Revised Cost Estimate for KNC (4-15-04).wb3

Everett Spellman  
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Kansas Department of Health & Environment  
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04/08/04 11:32 AM

To: "Katherine Dunn (E-mail)" <kdunn@kdhe.state.ks.us>, "Everett Spellman (E-mail)" <ESpellma@kdhe.state.ks.us>  
cc: "Mostafa Kamal (E-mail)" <mkamal@kdhe.state.ks.us>, "Stephen M. Richmond [SRICHMOND@bowditch.com] (E-mail)" <SRICHMOND@bowditch.com>  
Subject: Revised Closure, Post-Closure, and Corrective Action Cost Estimate

Kathy & Everett,

I have attached KNC's Revised Cost Estimate for Closure, Post-Closure, and Corrective Action for the RCRA Part B Permit. I used the cost estimate supplied by KDHE as a guideline for preparing the cost estimate. I reviewed all of the tasks and costs and revised where needed based on recent data and costs. There were some instances where I used the same number as KDHE proposed since I could not find any better data than what KDHE had determined. One task was removed from the Remedial System. The Treatment

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(electrochemical reduction unit) was removed from the cost estimate since this is not a requirement for cleanup purposes but rather a unit used to clean the groundwater to levels where it can be used for operational purposes. If the facility were to go bankrupt or shutdown, the electrochemical unit would not be operated, so these costs would not continue. The groundwater currently recovered by the remediation system is well below the UIC injection well permit limits even prior to cleanup by the electrochemical unit.

Please review and determine if the Revised Cost estimate meets KDHE's approval. If the cost estimate is approved it will be included in the Permit Application currently under revision and it will also be submitted as a separate submittal for approval and ultimately a Financial Assurance will be provided to KDHE once approved.

<<RCRA Part B Cost Estiamte 040504.xls>>

Brian Moore  
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- RCRA Part B Cost Estiamte 040504.xls

**KDHE COST ESTIMATE  
FOR KOCH NITROGEN COMPANY**

TASK	COST (US\$)	CLOSURE (US\$)	POST-CLOSURE (US\$)
<b>Groundwater Monitoring</b>			
Sample Collection (Labor)			
Quarterly (for 25 wells)	\$18,960		
Semi Annual (for 13 wells)	\$3,920		
Residential (10 wells)	\$2,824		\$25,704
Sample Analysis			
Quarterly Chrome/Nitrate (25 wells)	\$3,920		
Semi Annual Chrome/Nitrate (13 wells)	\$1,050		
Semi Annual VOC samples (7 wells)	\$1,800		
Residential (10 wells)	\$2,200		\$8,970
Sample Shipment	\$800		\$800
Semi-Annual Reporting	\$12,400		\$12,400
Well Maintenance			
Mowing	\$2,000		
Well Cap Replacement	\$940		
Maintenance and Equipment Replacement	\$2,000		
Monitoring Well Replacement	\$2,500		\$7,440
Annual Groundwater Monitoring			\$55,314
<b>30-YEAR GROUNDWATER MONITORING</b>			<b>\$1,659,420</b>
<b>Remedial System</b>			
Recovery Well Operation (66 wells)			
Electricity Costs	\$26,040		
Maintenance (pump/well)	\$5,000		
Inspection Costs	\$5,000		
Recovery Well Replacement	\$2,500		
Pipeline maintenance	\$1,500		
Storage Tank Maintenance	\$2,000		
Storage Tank Inspection	\$2,400		
Sludge Disposal	\$1,000		
Semi-Annual Reporting	\$2,000		\$47,440
Pre-Disposal Pipeline			
Pipeline maintenance (pump,pH control system)	\$2,000		
Durco Filter	\$5,000		
Inspection Costs	\$5,000		\$12,000
Disposal Well Operation (2 ICDWs)			
Annual Fall-off Test	\$10,000		
Mechanical Integrity Test (MIT - Internal/External)	\$3,200		
Inspection Costs - Labor	\$31,025		
Operation Monitoring - Analytical	\$6,600		
Reporting	\$1,000		
Routine Maintenance	\$5,000		
Repermitting	\$3,000		
Workover (new injecting tubing)	\$15,000		\$74,825
Annual Remedial System Operation			\$134,265
<b>30-YEAR REMEDIAL SYSTEM OPERATION</b>			<b>\$4,027,950</b>
<b>Chrome Destruct Unit (Closure/Post-Closure)</b>			
Closure			
Estimate from Koch Nitrogen Company	\$114,000		
TOTAL CDU CLOSURE		\$114,000	
Post-Closure Monitoring			
Inspection Costs	\$170		
Reporting	\$500		
Maintenance	\$400		\$1,070
Annual Post-Closure Care			\$1,070
Post-Closure Certification (one time expense)	\$3,000		
<b>30-YEAR CDU POST-CLOSURE CARE</b>			<b>\$35,100</b>
<b>SUBTOTALS</b>		<b>\$114,000</b>	<b>\$5,722,470</b>
Contingency Cost (10%)		\$11,400.0	\$572,247.0
<b>TOTAL</b>		<b>\$125,400.0</b>	<b>\$6,294,717.0</b>

**Koch Nitrogen Company**  
**Dodge City Nitrogen Plant**  
 Closure, Post-Closure, and Corrective Action Cost Estimate  
 April 5, 2004

TASK	COST	CLOSURE	POST-CLOSURE
<b>Groundwater Monitoring</b>			
Sample Collection (Labor)			
Quarterly (25 wells)	\$18,984		
Semi Annual (13 wells)	\$3,136		
Residential (10 wells)	\$766		\$23,652
Sample Analysis			
Quarterly Chrome/Nitrate (25 wells)	\$3,500		
Semi Annual Chrome/Nitrate (13 wells)	\$910		
Semi Annual VOC samples (7 wells)	\$1,400		
Residential (10 wells)	\$1,400		\$7,210
Sample Shipment	\$800		\$800
Semi-Annual Reporting	\$12,400		\$12,400
Well Maintenance			
Mowing	\$2,000		
Well Cap Replacement	\$940		
Maintenance and Equipment Replacement	\$2,000		
Monitoring Well Replacement	\$2,500		\$7,440
Annual Groundwater Monitoring			<u>\$51,502</u>
30-YEAR GROUNDWATER MONITORING			<u>\$1,545,060</u>
<b>Remedial System</b>			
Recovery Well Operation (66 wells)			
Electricity Costs	\$26,040		
Maintenance (pmp/well)	\$5,000		
Inspection Costs	\$5,000		
Recovery Well Replacement	\$2,500		
Pipeline Maintenance	\$1,500		
Storage Tank Maintenance	\$2,000		
Storage Tank Inspection	\$2,000		
Sludge Disposal	\$1,000		
Semi Annual Reporting	\$2,000		\$47,040
Pre-Disposal Pipeline			
Pipeline Maintenance (pump, pH control system)	\$2,000		
Durco/Final Filter	\$5,000		
Inspection Costs	\$5,000		\$12,000
Disposal Well Operation (2 ICDWs)			
Annual Fall-off Test	\$10,000		
Mechanical Integrity Test (MIT - Internal/External)	\$2,400		
Inspection Costs - Labor	\$18,250		
Operation Monitoring - Analytical	\$3,000		
Reporting	\$1,000		
Routine Maintenance	\$5,000		
Repermitting	\$3,000		
Workover (as needed, may only be once every 10 yrs)	\$5,000		\$47,650
Annual Remedial System Operation			<u>\$106,690</u>
30-YEAR REMEDIAL SYSTEM OPERATION			<u>\$3,200,700</u>
<b>Chrome Destruct Unit (Closure/Post-Closure)</b>			
Closure			
See Closure Cost Estimate	\$114,000		
TOTAL CDU CLOSURE		<u>\$114,000</u>	
Post-Closure Monitoring			
Inspection Costs	\$170		
Reporting	\$500		
Maintenance	\$400		\$1,070
Annual Post-Closure Care			\$1,070
Post-Closure Certification (one time expense)	\$3,000		
30-YEAR CDU POST-CLOSURE CARE			\$35,100
<b>SUBTOTALS</b>		<u>\$114,000</u>	<u>\$4,780,860</u>
Contingency Cost (10%)		\$11,400.0	\$478,086.0
<b>TOTAL</b>		<u>\$125,400.0</u>	<u>\$5,258,946.0</u>

Koch Nitrogen Company  
Dodge City Plant  
Closure and Post-Closure Cost Estimate  
December 2003

Quarterly Treatment System Operation & Maintenance Cost  
Disbursements

Item No.	Task 1 Ground Water Sampling		Task 2 System Maintenance and		Task 3 Reporting		Task 4		Task 5		Task 6		Task 7		Task 8		Task 9		Task 10		Total Expenses		
	No.	Expense	No.	Expense	No.	Expense	No.	Expense	No.	Expense	No.	Expense	No.	Expense	No.	Expense	No.	Expense	No.	Expense			
01 Federal Express/Postage	200.00	4	800																			\$800	
02 Express Mail Service	26.00																						\$0
03 Air Transportation	500.00																						\$0
04 Car Rental	50.00	8	400																				\$450
05 Personal Car	0.32																						\$0
06 Tolls/Parking	5.00																						\$0
07 Meals (per day)	10.00	10	100																				\$100
08 Hotel (per day)	60.00	10	600																				\$600
Subtotal			1,900																				\$1,900
Markup	15%		285																				\$285
Total External Expenses			2,185																				\$2,185

Laboratory Expenses

01 Waste Samples	0.00																						\$0
02 Soil Samples	20.00																						\$0
03 Sediment Samples	0.00																						\$0
04 GW Samples (Chromium/Nitrates) (25 wells) quarterly	35.00	100	3,500																				\$3,500
05 GW Samples (Chromium/Nitrates) (13 wells) Semi-Annually	35.00	28	910																				\$910
06 Residential Samples (Chromium/Nitrates) (10 wells) quarterly	35.00	40	1,400																				\$1,400
07 Ground Water Samples (VOC) (7 wells) Semi-Annually	100.00	14	1,400																				\$1,400
Subtotal			7,210																				\$7,210
Markup	0%																						\$0
Total Laboratory Expenses			7,210																				\$7,210

Subcontractors Expenses

01 Geoprobe	1500.00																						\$0
02 Well Installation	2000.00																						\$0
03 Well Operation/Maintenance				5,500																			\$5,500
04																							\$0
05																							\$0
Subtotal				5,500																			\$5,500
ERM Markup	0%																						\$0
Total Subcontractor Expenses				5,500																			\$5,500
Total Disbursements			\$9,395	\$5,900		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,895

Koch Nitrogen Company  
Dodge City Plant  
Closure and Post-Closure Cost Estimate  
December 2003

Quarterly Treatment System Operation & Maintenance Cost  
Labor Costs (page 1)

Title Name Rate	Project Manager		Sr. Proj Geologist		Project Geologist		Senior Engineering		Project Engineer		Associate Engineer		Prin Chemist		Proj Chemist	
	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue
	6	\$125	0	\$0	35	\$80	15	\$70	0	\$0	0	\$0	0	\$0	0	\$0

Project

Task No.

Task Description

Task No.	Task Description	Project Manager	Sr. Proj Geologist	Project Geologist	Senior Engineering	Project Engineer	Associate Engineer	Prin Chemist	Proj Chemist								
01	GW Sampling Quarterly (25 wells)	6	750	35	2,450												
02	GW Sampling Semi-Annually (13 wells)	2	250	15	1,050												
03	Residential Sampling (10 wells)	2	250	4	280												
04	System Maintenance and Operation																
05	Reporting	8	1,000	30	2,100												
06																	
07																	
08																	
<b>TOTAL BY INDIVIDUAL:</b>		<b>18</b>	<b>\$2,250</b>	<b>0</b>	<b>\$0</b>	<b>84</b>	<b>\$5,880</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>

**Koch Nitrogen Company  
Dodge City Plant  
Closure and Post-Closure Cost Estimate  
December 2003**

**Quarterly Treatment System Operation & Maintenance Cost  
Labor Costs (page 2)**

Project Task	Task Description	Pnn Scientist		Proj Scientist		Technician		Admin		CADD		Data Base		Proj Accounting		Total ERM Labor	
		Rate		Rate		Rate		Rate		Rate		Rate		Rate		Rate	
		Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue	Hours	Revenue
01	GW Sampling Quarterly (25 wells)					35	1,540									76	\$4,740
02	GW Sampling Semi-Annually (13 wells)					15	660									32	\$1,960
03	Residential Sampling (10 wells)					4	176									10	\$706
04	System Maintenance and Operation																\$0
05	Reporting															38	\$3,100
06	0																\$0
07	0																\$0
08	0																\$0
<b>TOTAL BY INDIVIDUAL:</b>		0	\$0	0	\$0	54	\$2,376	0	\$0	0	\$0	0	\$0	0	\$0	156	\$10,506