From:

Soellner, Jeffrey K

Sent: To: Thursday, October 13, 2005 10:20 AM Kuehling, Harlan H.; Evanson, Theresa A.

Subject:

RE: Reedsburg Cleaners Interim Action Scope of Work

Looks like a good plan to me. Jeff

Jeffrey Soellner, Fund Manager
Dry Cleaner Environmental Response Fund (DERF)
Bureau of Community Financial Assistance
WI DNR
phone 608-266-1967
fax 608-267-0496
Jeffrey.Soellner@dnr.state.wi.us
Check out the DERF web site
http://www.dnr.state.wi.us/org/caer/cfa/LR/drycleaner/dryclean.html

From:

Kuehling, Harlan H.

Sent: To: Thursday, October 13, 2005 9:27 AM Soellner, Jeffrey K; Evanson, Theresa A.

Subject:

RE: Reedsburg Cleaners Interim Action Scope of Work

Hi, Folks.

Thanks for your voice-mail message late yesterday afternoon, Jeff. I strongly agree with you that I must make it very clear to all three consultants who have submitted RA proposals (Triad, BT2, and STS) that I am requesting a price quote for the IA work from all three of them. I had intended to do that in the letter and to also mention that to the two of you in my e-mail below, but forgot to do that in both places. I have revised the beginning portion of paragraph 2 of the draft letter to make it clear, in two separate sentences, that all three firms are being asked to submit a price quote for the IA work. Here is the revised version.

<< File: Reedsburg Cleaners IA SOW Itr.doc >>

Thanks.

Hank

From:

Kuehling, Harlan H.

Sent: To: Wednesday, October 12, 2005 2:03 PM Soellner, Jeffrey K; Evanson, Theresa A.

Subject:

Reedsburg Cleaners Interim Action Scope of Work

Hi, Jeff and Terry,

Included here is a draft scope of work and request for costs for the interim action at Reedsburg Cleaners that we have been discussing.

<< File: Reedsburg Cleaners IA SOW ltr.doc >>

Please review it and send your revision suggestions to me, but do this only if you have the time. Realizing that you both have many priorities tugging at your work-time, I can go forward, but your opinions have resulted and will result in a better approach that complies with the DERF process. If you do have the time and can get to it by the end of this week, I will call the RP with a courtesy call at the beginning of next week and describe the contents of the letter. Assuming that he can live with it, I will send it to the three consultants with pending RA proposals for this site.

Thanks very much.

From:

Evanson, Theresa A.

Sent:

Monday, October 10, 2005 9:32 AM

To:

Kuehling, Harlan H.; Soellner, Jeffrey K

Subject:

RE: Reedsburg Cleaners - RP's Request

Hi Hank -- I think this is a good plan. In the proposal, you can write up a short narrative description explaining the relationship between the IA & the revised bids that will be requested after the IA results are available. You might also include the fact that (since the RA bids will be new bids), the August 2005 rule changes will apply. Each bidder will need to include an NR 722 evaluation of the technical & economic feasibility of appropriate alternatives for the site, including an evaluation of natural attenuation and enhanced natural attenuation (see NR 169.23(6)(a)); a proposal for a pilot test for active remedies (NR 169.23(6)(d)); along with all other rule requirements for bids.

Good luck. I hope this all works out!

Terry

From:

Kuehling, Harlan H.

Sent: To: Thursday, October 06, 2005 2:48 PM Evanson, Theresa A.; Soellner, Jeffrey K

Subject:

Reedsburg Cleaners - RP's Request

Hello, Terry and Jeff,

I spoke with the RP for this site, Wayne Butz, this morning and suggested the plan that the three of us came up with recently (separate interim action of the installation of one additional down-gradient monitoring well, one round of GW monitoring of the new well and the existing monitoring wells, and 2-4 soil borings with analyzed samples from the source area). Wayne agrees with this, but wants to get going this fall. I told him that he has to get 3 bids and that the "cleaner" way to do this is to get price quotes from three consultants other than the three with submitted proposals. However, I just reread our previous e-mails and am reminded that it is possible but not necessary to get three bids from consultants for the interim action.

Wayne was quite assertive that he wanted one of the three proposing consultants to do the interim work, and I admit that I can't come up with an even more persuasive argument against this. I can think of arguments for and against using the proposing consultants. In fact, he still likes Triad Engineering and wants them to do the work. So, all things considered, here is what I propose. I will write a scope of work to cover the necessary interim actions, and will help Wayne request that all three proposing consultants give us a price quote for the IA work and explain why an IA is a good idea, telling them that the lowest cost bid will be chosen (and possibly not all three will submit a price). At the same time, I will tell them that all three will have a chance to revise their proposals, based on the results of the IA. I will also mention the required tasks of the RA proposals that have surfaced since the revised proposals were submitted in June; i.e., necessary source control RA, and necessary pilot studies for any active RA. After revised proposals have been received from the consultants choosing to resubmit their proposals one more time, we pick the lowest-cost one that has a reasonable chance of being successful.

OK?

Thanks very much for your time.

Hank

From:

Soellner, Jeffrey K

Sent: To: Thursday, September 22, 2005 9:37 AM Evanson, Theresa A.; Kuehling, Harlan H.

Subject:

RE: Reedsburg Dry Cleaner

I think that this updated information at this site is going to make it easier for everyone in the end, but you are breaking new ground, Hankl. This sequence of events was not thought of when the code was written so there is no specific code that addresses some of these questions. So your question ... "so would it be the decision of the RP to allow or not allow the interim action consultant to submit a bid proposal for the remedial action if the consultant desires to" ... is not addressed. I think that you mentioned to me also on the phone that this RP is somewhat suggestible and will follow your lead, especially when he know he needs your approval for reimbursement.

The one question that I have is what if, after the RP gets his information, then he want the interim consultant to finish the job? I don't think we have any code to stop that selection either... so you should make good use of your advice to the RP and then we are going to have to take things one step at a time after that.

One other thought is that maybe <u>you</u> can forward to the RP the specific list of tasks that need to be accomplished (something of a mini work plan) for the consultants to bid on... Jeff

From:

Evanson, Theresa A.

Sent: To: Thursday, September 22, 2005 8:24 AM Kuehling, Harlan H.; Soellner, Jeffrey K

Subject:

RE: Reedsburg Dry Cleaner

Hi Hank,

RE getting price quotes from 3 consultants for the interim action work -- I think if would be good if the RP is willing to do that, but it isn't strictly necessary. However, you will have to approve the scope of work & the proposed cost to do the work. The costs submitted have to be reasonable. Interim actions are usually performed by the consultant performing the SI, so they don't usually bid or even get competitive cost proposals for the work. I believe the staff expect to see the consultant services & other costs in line with what the consultant originally bid for the SI. Because the SI consultant is no longer around, the Reedsburg Cleaners is a little different. If you feel more comfortable asking the RP to solicit 3 proposals, then go ahead & do that.

How the RP goes about soliciting proposals for the IA is up to him. I do think your recommendations will be very helpful to him & it sounds like he wants your input. You are correct that you don't want all your time tied up handholding the RP, but the small DC who will only do 1 cleanup need a lot of help. If I were you, I'd recommend to the RP that he ask 2 or 3 non-bidding consultants to give him a price to do the IA work. If he only wants to work with the bidding consultants, that's his choice.

Terry

From:

Kuehling, Harlan H.

Sent: To: Wednesday, September 21, 2005 8:02 AM Evanson, Theresa A.; Soellner, Jeffrey K

Subject:

RE: Reedsburg Dry Cleaner

Terry & Jeff,

Thank you very much for sharing your time and knowledge in getting this site going in the right direction. Specifically, thanks for considering the idea of an interim action. While the consultants may not be pleased that they will have to refine their proposals, it may be easier for them to refine their proposals with a better idea of the current status of the site's problems.

The tasks of the interim action, as summarized below, should get us the current information that we and the bidders need. I have just a couple of clarifying questions. Should the RP get price quotes from three different consultants, our usual approach, for the interim action? I like the idea of not involving the current bidders in the interim action, so would it be the decision of the RP to allow or not allow the interim action consultant to submit a bid proposal for the remedial action if the consultant desires to?

I realize that the emphasis of the DERF program is on the RP being responsible for much of the coordination of the work done for these sites and I will stick to that approach as much as possible. But I also empathize with "mom & pop" RPs as they deal with a situation with which they have little experience. I have found Wayne Butz, so far, to be engaged and willing to learn more about his site's situation, so I plan to help him when needed, which may be often, but also plan to keep some boundaries around how much time I spend on this site. And I will call Tom Hvizdak and Kristin DuFresne for their thoughts on this issue, at your suggestion, Terry. Does all of this sound reasonable?

Thanks again.

Hank

From:

Evanson, Theresa A.

Sent:

Tuesday, September 20, 2005 4:16 PM

To:

Kuehling, Harlan H.

Cc:

Soellner, Jeffrey K

Subject:

Reedsburg Dry Cleaner

Hi Hank.

I discussed the idea of an interim action at Reedsburg with Jeff. We think that the approach of using an interim action to collect the additional information you need to move forward with the RA will work. The owner will need to choose a consultant (I personally think it might be best to choose one who did NOT bid) to do the following:

- install 1 additional downgradient well along the centerline of the plume
- take water samples from the new & existing groundwater wells. Samples should be analyzed for standard MNA parameters, VOCs & TOC.
- collect 2 4 soil samples in the source area for VOCs & TOC

This work does NOT need to be bid, however, the consultant needs to get bids on the commodity work. including well drilling & lab analysis. Once the data come back, send the data to the 3 bidders & ask them to update their bids & have the RP select the bidder & go forward with the RA.

If Jeff has any further thoughts on this, he'll contact you.

Theresa A. Evanson

Hydrogeologist Technical Resources Section Bureau for Remediation & Redevelopment Wisconsin Department of Natural Resources

(電) fax:

(S) phone: (608) 266-0941

(608) 267-7646

(E) e-mail: Theresa.Evanson@dnr.state.wi.us

From:

Kuehling, Harlan H.

Sent: To:

Wednesday, September 14, 2005 10:48 AM Soellner, Jeffrey K; Evanson, Theresa A.

Subject:

Summary of the Proposed Remedial Actions for Reedsburg Cleaners

Hi. Folks.

During our phone conversation on Monday, Jeff, I promised to summarize the proposed remedial actions from the three recently submitted revised proposals from Triad Engineering, STS Consultants, and BT2, Inc., so here it is.

TRIAD ENGINEERING, INC.

- 1. Install an additional distant down-gradient monitoring well along the interpolated plume centerline
- 2. Complete a round of GW monitoring at all monitoring wells prior to active remediation implementation
- 3. Install a source area SVE well with a wind-driven turbine ventilator
- 4. Inject sodium permanganate into 25 injection points over 3-5 days
- 5. Conduct one round of GW monitoring and send an interim report
- 6. Conduct up to 7 additional quarterly rounds of GW monitoring and submit final report

Estimated cost: \$162,569

Triad Eng. has submitted an addendum to the proposal that includes the following:

- 7. Collect and analyze 4 soil samples from 2 Geoprobes in the "hottest" part of the source area
- 8. Soil Remediation physically mix hydrogen peroxide with soil in this more immediate source area with verification "grab" samples
- 9. In addition to tasks 1-6 above, a second sodium permanganate injection may be necessary, based on follow-up GW monitoring. Also considered as an option, either as a supplement to the two injection rounds or following the first round (the proposal isn't clear on this), is the injection of EOS (food-grade soybean oil, surfactants, and nutrients) to promote bioremediation. The cost of this option, \$25,987, is not included in the addendum costs. Estimated cost: \$67,773

Total cost of Triad's proposal (without the required pilot test or EOS option): \$230,342

STS CONSULTANTS, LTD.

IlW-mughter he were to week 1. Install an additional distant down-gradient monitoring well along the interpolated plume centerline

2. Complete a round of GW monitoring at all monitoring wells prior to active remediation implementation

3. Soil Remediation - remove the three existing sand-filled USTs in the area of contaminated soil (DERF reimbursable?), then mix 12 tons of DARAMEND (organic material and reduced iron and/or zinc) with the contaminated soil with a Lang Tool Co. In-Situ Blender. Verification samples from 6 Geoprobes will be collected 6 weeks after treatment.

4. GW Remediation - apply 12,600 lbs. of "Newman Zone" (emulsified soybean oil, sodium lactate, and stabilizing agents)

in 10 injection wells over three days to promote bioremediation, followed by an interim report

5. Post-remedial action GW monitoring will be conducted quarterly for two years, followed by a request for closure. Estimated cost: \$227,724 (I suspect this doesn't include the cost of a pilot test)

- 1. Install an additional distant down-gradient monitoring well along the interpolated plume centerline
- 2. Complete a round of GW monitoring at all monitoring wells prior to active remediation implementation
- 3. Install a four-well SVE system soil remediation system, with final design based on a pilot test well, and operate the system for approximately two years to remediate the contaminants in the unsaturated zone. However, if the baseline GW sampling indicates that SVE will not be an effective remedial method for soil and GW, the alternate method of HRC (hydrogen release compound?) injection will instead be implemented, using 43 temporary wells and 4,350 lbs. of HRC.
- 4. Complete three monthly rounds of GW sampling, followed by 3 quarterly rounds, then implement a long-term monitoring program of quarterly GW monitoring for an assumed duration of 2 years.

Estimated cost (with SVE only): \$213,837 (SVE costs: \$118,213)

Estimated cost for the HRC contingency: \$75,019

(It is not clear to me, because of proposal ambiguities, whether HRC might be chosen to replace the SVE proposal or would be implemented in addition to the SVE system. No pilot test for HRC injection is mentioned in the proposal.)

I hope that these short summaries give you both an overview of the three proposals, which have some similarities and certainly significant differences. As we have discussed, the RP favors Triad Engineering, for non-technical reasons, so I have discussed their proposal as some length with both of you, and especially you, Terry. Interestingly, their proposal started off as the lowest cost approach, but their costs have increased significantly with the addition of a soil remediation method and second injection event, and these costs don't include the cost of the required pilot test. Since the estimated costs of the three proposals have not been finalized yet because of missing pieces of information, I am planning to consider all three on technical merits while I get complete cost estimates, then discuss this information with the RP, give him my recommendation for consultant/proposal, and see what he has for an opinion.

(By the way, another thing to keep in mind is that PVOC-contaminated GW is migrating across the Reedsburg Cleaners site from the up-gradient Spellman Monument site.)

And, Jeff, thanks for finding and sending the code requirement for pilot testing of proposed active remediation methods. This is very helpful.

Hank W/ Terry 2 9/20/05

Plat tests - can exempt it consultant justifies. 164.23(4) must freat so: 1

Darumend - Yes!

DERF: 4500,000 This may max

Terry recommends:

With at 57stem we have throdogradation) - Looks at SI har break-down products

Current permanganate sites thitwankowack - prized results (To. of warren)

Triad & BT2 are switching from exiduting to reductive processings

2 yrs. may not be long enough from reclackive dechlorination.

RF- justify choose it not loves I cost aption

Mules sense to day not switch in-situ processos (reductive dechlorination)

Call Tom or Kristing

169.16 (24) No tank removal reignbursed

Does Davamend treat CVCCs? (no clear in proposal)

Resonance of the closes of treat and services?

N.C. -need to control tip of phome

- Interime action for sumpling? 169.11(1)(6) 4. Int. Hotion

- Do TOC & other NA parameters

From:

Kuehling, Harlan H.

Sent: To: Wednesday, September 14, 2005 10:48 AM Soellner, Jeffrey K; Evanson, Theresa A.

Subject:

Summary of the Proposed Remedial Actions for Reedsburg Cleaners

Hi, Folks,

During our phone conversation on Monday, Jeff, I promised to summarize the proposed remedial actions from the three recently submitted revised proposals from Triad Engineering, STS Consultants, and BT2, Inc., so here it is.

TRIAD ENGINEERING, INC.

- 1. Install an additional distant down-gradient monitoring well along the interpolated plume centerline
- 2. Complete a round of GW monitoring at all monitoring wells prior to active remediation implementation
- 3. Install a source area SVE well with a wind-driven turbine ventilator
- 4. Inject sodium permanganate into 25 injection points over 3-5 days
- 5. Conduct one round of GW monitoring and send an interim report
- 6. Conduct up to 7 additional quarterly rounds of GW monitoring and submit final report

Estimated cost: \$162,569

Triad Eng. has submitted an addendum to the proposal that includes the following:

- 7. Collect and analyze 4 soil samples from 2 Geoprobes in the "hottest" part of the source area
- 8. Soil Remediation physically mix hydrogen peroxide with soil in this more immediate source area with verification "grab" samples
- 9. In addition to tasks 1-6 above, a second sodium permanganate injection may be necessary, based on follow-up GW monitoring. Also considered as an option, either as a supplement to the two injection rounds or following the first round (the proposal isn't clear on this), is the injection of EOS (food-grade soybean oil, surfactants, and nutrients) to promote bioremediation. The cost of this option, \$25,987, is not included in the addendum costs.

Estimated cost: \$67,773

Total cost of Triad's proposal (without the required pilot test or EOS option): \$230,342

STS CONSULTANTS, LTD.

- 1. Install an additional distant down-gradient monitoring well along the interpolated plume centerline
- 2. Complete a round of GW monitoring at all monitoring wells prior to active remediation implementation
- 3. Soil Remediation remove the three existing sand-filled USTs in the area of contaminated soil (DERF reimbursable?), then mix 12 tons of DARAMEND (organic material and reduced iron and/or zinc) with the contaminated soil with a Lang Tool Co. In-Situ Blender. Verification samples from 6 Geoprobes will be collected 6 weeks after treatment.
- 4. GW Remediation apply 12,600 lbs. of "Newman Zone" (emulsified soybean oil, sodium lactate, and stabilizing agents) in 10 injection wells over three days to promote bioremediation, followed by an interim report
- 5. Post-remedial action GW monitoring will be conducted quarterly for two years, followed by a request for closure. Estimated cost: \$227,724 (I suspect this doesn't include the cost of a pilot test)

BT2, INC.

- 1. Install an additional distant down-gradient monitoring well along the interpolated plume centerline
- 2. Complete a round of GW monitoring at all monitoring wells prior to active remediation implementation
- 3. Install a four-well SVE system soil remediation system, with final design based on a pilot test well, and operate the system for approximately two years to remediate the contaminants in the unsaturated zone. However, if the baseline GW sampling indicates that SVE will not be an effective remedial method for soil <u>and</u> GW, the alternate method of HRC (hydrogen release compound?) injection will instead be implemented, using 43 temporary wells and 4,350 lbs. of HRC.
- 4. Complete three monthly rounds of GW sampling, followed by 3 quarterly rounds, then implement a long-term monitoring program of quarterly GW monitoring for an assumed duration of 2 years.

Estimated cost (with SVE only): \$213,837 (SVE costs: \$118,213)

Estimated cost for the HRC contingency: \$75,019

(It is not clear to me, because of proposal ambiguities, whether HRC might be chosen to replace the SVE proposal or would be implemented in addition to the SVE system. No pilot test for HRC injection is mentioned in the proposal.)

I hope that these short summaries give you both an overview of the three proposals, which have some similarities and certainly significant differences. As we have discussed, the RP favors Triad Engineering, for non-technical reasons, so I have discussed their proposal as some length with both of you, and especially you, Terry. Interestingly, their proposal started off as the lowest cost approach, but their costs have increased significantly with the addition of a soil remediation method and second injection event, and these costs don't include the cost of the required pilot test. Since the estimated

costs of the three proposals have not been finalized yet because of missing pieces of information, I am planning to consider all three on technical merits while I get complete cost estimates, then discuss this information with the RP, give him my recommendation for consultant/proposal, and see what he has for an opinion.

(By the way, another thing to keep in mind is that PVOC-contaminated GW is migrating across the Reedsburg Cleaners site from the up-gradient Spellman Monument site.)

And, Jeff, thanks for finding and sending the code requirement for pilot testing of proposed active remediation methods. This is very helpful.

Hank

From:

Soellner, Jeffrey K

Sent: To: Monday, September 12, 2005 10:07 AM Kuehling, Harlan H.; Evanson, Theresa A.

Subject:

Pilot testing mandate

After talking with Hank, I knew somewhere that in the new code pilot testing was mandated for all <u>active</u> remediation methods unless the consultant can justify not doing it... **NR 169.23(6)(d) Wis. Adm. Code** in the section about Remedial Action Proposal Estimate Content.

Jeffrey Soellner, Fund Manager
Dry Cleaner Environmental Response Fund (DERF)
Bureau of Community Financial Assistance
WI DNR
phone 608-266-1967
fax 608-267-0496
Jeffrey.Soellner@dnr.state.wi.us
Check out the DERF web site
http://www.dnr.state.wi.us/org/caer/cfa/LR/drycleaner/dryclean.html