From:	Joey Pace			
То:	Dhont, Jeffrey			
Cc:	Karin Harker			
Subject:	Re: Posi-Shell			
Date:	Wednesday, March 30, 2022 11:23:37 AM			
Attachments:	<u>ATT00001.txt</u>			
	2022-03-25 Humboldt Smelter 7Acres Posi-Shell.pdf			

Hi Jeff: I just got Agency approval to proceed! Please see the attached Cost Estimate. I am preparing all of the Purchase Order contract paperwork today. This additional application of Posi-Shell will be included in the cost-share for the Humboldt Smelter Project and will likely occur mid-to-late-April, as we need to order the materials and have ERI's availability (which should work out since they will be onsite for the Pumphouse work in the same timeframe).

I took a walk of the entirety of the existing posi-shell. Together with Tetra Tech, we conservatively estimated the need for 7 acres of repair. There were almost no areas where repair could not be justified. Even though the aerials might suggest there are some fully competent areas of existing Posi, there really are not. I took a video of me walking the entire "north" area, but it's too large to send to you so we'll have to screenshare (one pic is attached). The Posi-Shell Representative who was onsite two weeks ago suggested the level of degradation we were seeing is from a mix of factors, including a very heavy monsoon, trespass from human/animal, and the original application of Posi-Shell being a "Light Application". Further, Posi-Shell was sprayed directly onto vegetation in some areas, versus crushing the vegetation down first before applying, so as the vegetation died and decayed, the Posi-Shell lost its base of support.

To address some of these issues, ADEQ is doing a "Medium Application" (50% more cement in our application), and is also crushing down areas of heavy vegetation first. The heavier application has had a positive result, in that the binding material is made stronger, and an acre (one sack) of posi-shell can actually cover more area (up to 30% more) with the additional cement added.

I'd be happy to catch up with you tomorrow (Thursday 03/31) between 3p-5p or next Tuesday (04/05) between 2p-5p if you want to discuss more and see the video. Just send me an invite for a time that works for you too.

# Joey Pace, PMP Project Manager/Hydrogeologist Ph: 602-771-4818



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Your feedback matters to ADEQ. Visit azdeq.gov/feedback

On Tue, Mar 29, 2022 at 4:02 PM Dhont, Jeffrey <<u>Dhont.Jeff@epa.gov</u>> wrote:

Hi Joey,

Early last week we had a discussion about where ADEQ may be able to cover with Posi-Shell out at the smelter and whether the compromised areas might be able to be expanded given ADEQ's budget. I was wondering whether there has been any developments in that?

Jeff

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Jeffrey A. Dhont

Environmental Scientist / Superfund Project Manager

U.S. Environmental Protection Agency, Region IX

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March 24, 2022

Ms. Joey Pace Project Manager, Federal Projects Unit Waste Programs Division Arizona Department of Environmental Quality 1110 West Washington Street Phoenix, Arizona 85007

Via email:

# Subject: Proposal for Humboldt Smelter Posi-Shell Repair – 7 Acres

Dear Ms. Pace:

Tetra Tech, Inc. (Tetra Tech) is submitting this proposal at the request of the Arizona Department of Environmental Quality (ADEQ) to perform additional activities related to the Humboldt Smelter Site. At the direction of the ADEQ, as requested by the Environmental Protection Agency, an additional 7 acres of Posi-Shell<sup>®</sup> is proposed due the overall condition of remaining existing Posi-Shell<sup>®</sup> on-site. Based on aerial imaging, it is estimated that approximately 10 acres remain of the previously applied Posi-Shell<sup>®</sup>. During recent application of new Posi-Shell<sup>®</sup> by Tetra Tech, it has been determined the application rate is lower for desired coverage than previously estimated and the site can be completed by applying 11 acres total. This proposal presents a scope of work and budgetary cost estimate to perform the activities described herein.

### SCOPE OF WORK

The proposed scope of work for this project is divided into two tasks, and the sections below describe the specific activities to be performed under each task.

Task 1 – Posi-Shell<sup>®</sup> Repair – 7 Acres

#### Task 1 – Posi-Shell® Repair - 7 Acres

Application of up to 7 acres of Posi-Shell<sup>®</sup> repair will require the following to be provided by Tetra Tech and its subcontractor:

- 84 super sacks of Posi-Shell<sup>®</sup> material and transport out of California.
- 84 super sacks of Portland cement and local transport.
- Rental of a Model PSA-3000 Posi-Shell<sup>®</sup> applicator.
- A crew to perform mixing and application for up to 15 days.
- Full time oversight by Tetra Tech of subcontractor activities.

#### ASSUMPTIONS

Tetra Tech has developed this scope of work based on the following assumptions:

• Necessary access agreements, or authorizations, will be in place for the subject work and will

be provided by the ADEQ.

- Physical Site access is assumed to be clear, and the schedule assumes no delays due to Site access restrictions or weather events.
- Field oversight provided by Tetra Tech included in this estimate assumes 15 days (12-hour days) under Task 1.

# BUDGET REQUEST AND SCHEDULE

The total budget request for the tasks described above is **\$276,880.50**; and the task budget details are summarized in the attached price proposal. This work will be performed on a Time and Materials (T&M) basis under the existing **Arizona Superfund Response Action Contract (ASRAC) between Tetra Tech and ADEQ – No. CTR045160**. As per the terms and conditions of this contract, the work described herein will not exceed the authorized budget without prior authorization from ADEQ.

Tetra Tech is prepared to begin work immediately upon receipt of a signed Task Order for the project. We anticipate completing this assignment within 8 weeks of project award subject to contractor availability.

Tetra Tech is pleased to have the opportunity to serve the ADEQ on this project. Our project team is ready to commence work upon approval from ADEQ.

Sincerely, Tetra Tech, Inc.

hul Dennett

Mekaela Bennett, EIT Project Manager

# **Te** Project Cost Summary

24-Mar-22

Humboldt Smelter - Posi-Shell Repair ADEQ

Attention: Joey Pace

Phases / Tasks		Project Total			Task 1 - Posi-Shell		
		240 hrs	\$	276,880.50	Repa	air -	7 Acres
Tetra Tech Labor	Hrly Rate	Tot Est. Hrs	Т	otal Est. Cost	Hours		Cost
Professional Level V	\$167.00	40.0	\$	6,680.00	40.0	\$	6,680.00
Professional Level IV	\$140.00	16.0	\$	2,240.00	16.0	\$	2,240.00
Professional Level III	\$125.00	16.0	\$	2,000.00	16.0	\$	2,000.00
Professional Level II	\$112.00	168.0	\$	18,816.00	168.0	\$	18,816.00
Subtotal Tetra Tech Labor		240.0 hrs	\$	29,736.00	240.0	\$	29,736.00
Total Tetra Tech Labor			\$	29,736.00		\$	29,736.00
Subcontractors	1		Т	otal Est. Cost			Cost
Unspecified Sub (ERI - Subcontractor)	•		\$	233,000.00		\$	233,000.00
Subtotal Subcontractors			\$	233,000.00		\$	233,000.00
		Markup	\$	11,650.00	5.00%	\$	11,650.00
Total Subcontractors			\$	244,650.00		\$	244,650.00

Other Direct Costs	Total Est. Cost	Cost
Per Diem	\$ 1,120.00	\$ 1,120.00
Hotel	\$ 1,152.00	\$ 1,152.00
Mileage Allotment	\$ 222.50	\$ 222.50
Subtotal Other Direct Costs	\$ 2,494.50	\$ 2,494.50
Total Other Direct Costs	\$ 2,494.50	\$ 2,494.50
Project/TaskTotal	\$ 276,880.50	\$ 276,880.50
PROJECT Total	\$ 276,880.50	

