

600 Wilshire Blvd, Suite 600 Los Angeles, California 90017 tel: 310 457-2200

June 9, 2017

Mr. Mark Norton Water Resources & Planning Manager Santa Ana Watershed Project Authority 11615 Sterling Avenue Riverside, California 92503

Subject: Task Order No. CDM 374 Triennial Ambient Water Quality Update Amendment Request.

Dear Mr. Norton:

On July 22, 2016 the Santa Ana Watershed Protection Agency (SAWPA) issued Task Order No. CDM 374-01 to CDM Smith for the Triennial Ambient Water Quality Update. The original budget for this task order was \$349,960 and work was to be completed by June 30, 2017. Subsequently, SAWPA authorized Optional Task 2 and increased the budget by \$19,200 to a total of \$369,160. As we have discussed with you, unexpected issues occurred during the project which have impacted both the schedule and costs for this project. This letter is being provided to request a schedule extension and budget increase as detailed below.

Schedule Impacts

The original schedule for completion of this project of June 30, 2017 was based on was based on initiating the project on July 1, 2016 and completing the data collection effort by August 30, 2016. The initial request for data was issued by the Regional Water Quality Control Board (Regional Board) in August 2016 and most of the data were received by October 2016. However, some of the requisite data were not received until April 2017, approximately eight months after originally scheduled. This was due in part to agencies providing data having to be re-contacted to resolve data issues, such as duplicate data, missing data, and outliers. In addition to data delays, recently there were unexpected staff changes within CDM Smith that caused a several-week delay in performing the technical analysis.

While not all of the data was available when originally scheduled, work continued with the available data to minimize any potential schedule impacts. However, we have determined that the completion of the Technical Memorandum documenting the results of our analysis cannot be completed by June 30, 2017. Our proposed revised schedule for completing the work includes: delivery of the draft Technical Memorandum to SAWPA by July 31, 2017; review and comment by SAWPA by August 30, 2017; and submittal of the final Technical Memorandum the Regional Board by September 30, 2017. We believe we can provide a briefing to the Regional Board following receipt of comments from SAWPA and this briefing can be held in September.



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We are requesting that Task Order CDM-374 be extended to September 30, 2017 to accommodate this new schedule.

Budget Impacts

As discussed above, the data collection effort this project extended many months beyond the original scheduled period. For data that was received during the initial collection period, the required data analyses were completed. This was done to keep the project moving to avoid schedule delays. However, these data analyses are conducted by batch processing and the late receipt of data required that we complete a second round of analyses. These activities included: data receipt and completeness check; uploading data to the MS Access database; completing the four data QA/QC steps prescribed in the contract; filtering for the minimum annualized data; conducting the Shapiro Wilk test for normality; computing averages and water quality point statistics; producing pdfs of time-series data for groundwater elevation, total dissolved solids, and nitrate; and creating plots of averages and water quality point statistics.

The original budget to complete these activities was \$167,780 and the cost incurred due to the data issues was \$203,733. The additional cost associated with data activities is \$35,953. These costs are associated with additional work performed to complete the identified tasks and do not include any additional scope of work. We are requesting that budget for Task Order CDM-374 be increased to \$405,113 to accommodate the additional level of effort.

Please note that the costs impacts described here do not include any impacts due to the staff changes previously discussed. CDM Smith is not requesting any additional funds due to delays or additional effort caused by these changes.

We appreciate your consideration of this amendment request. Please contact me at (213) 457-2145 if you have any questions regarding this request.

Sincerely,

David Jensen, PE, BCEE, LEED® AP

Vice President CDM Smith Inc.

CDM Smith Email sent on Tuesday June 13th

Mark;

The information provided below is in response to your e-mail regarding CDM Smith's amendment request for Task Order CDM374 – Triennial Ambient Water Quality Update

The attached table provides a break of bill costs to date for CDM Smith, DBSA, and the total project. This table provides the basis for our request of \$35,593 to cover additional costs associated with data collection task (Task 1). Additional information regarding the data in the table is provided below.

- The amendment does reflect additional costs incurred to date. The intent of the amendment is to revise the project budget to cover these additional costs and retain the original budgets for the remaining tasks. Based on my discussions with DBSA, they intend to bill to the full amount of their original budget.
- The additional costs for the data collection effort resulted in a 16% increase in the cost for Task
 1.
- The additional costs incurred to date noted in the table are \$37,566 for task 1 (the budget shortfall shown at the bottom of the table) is slightly higher than the \$35,593 requested in the amendment. The additional cost shown in the table reflects updated billing information which I received after I did my calculation for the amendment request. Our requests remains \$35,593 and we are not asking SAWPA for this difference.
- The table includes a column showing the cost to complete each task. As noted above, DBSA intends to bill to their full budget which includes the \$7,743 shown for Task 1. The costs to complete for the remaining tasks reflect the original budget less the costs billed to date. No overruns are anticipated for these tasks.
- Note that the DBSA billing period is different than that shown for CDM Smith so their incurred
 cost is higher than billed amount shown in the table. As noted above, DBSA has indicated they
 will bill to their full budget amount.
- It is my understanding that Tasks 1a, 1b, 1c, 1d, and 1f are complete. The other tasks are in progress and no additional funding is being requested for these tasks.

The following is provided in response to your question regarding the break out of amendment work between DBSA and CDM Smith. Joe LeClaire and Hannah Erbele were the CDM Smith staff providing substantive technical analyses. Since both Joe and Hannah have transitioned to DBSA, CDM Smith intends to transfer its remaining budget (\$15,231) and the requested amendment amount (\$35,593) to DBSA to complete the project. CDM Smith will continue to provide oversight (i.e., DBSA subcontract management, project administration, and project close out) but these costs will not be charged to SAWPA and will be absorbed by CDM Smith.

The following is provided in response to your questions regarding providing written notification to SAWPA regarding costs overruns. Regardless of the following explanation, I agree that CDM Smith was remiss in not providing a more detailed estimate of the anticipated and actual cost overruns at an earlier time. Regarding notification of cost impacts, it is my understanding that CDM Smith did identify the issues with data collection, and that the budget would be impacted, in our status reports and during discussions at the task force meetings. From my discussions with Joe, he indicated that he could not know the full impact of the delays until all of the data was received and processed. He also felt that

asking for incremental increases as costs were incurred could cause schedule delays and would be administratively burdensome. As noted in our amendment request, we also felt that the additional costs represented an increase in level of effort and did not a require a formal change in the scope of work.

I will be at the Task Force meeting and will go over this information with you in more detail if required. Thank you again for your consideration of our amendment request.

David Jensen, P.E., BCEE, LEED AP | Vice President | CDM Smith | T: 213-457-2200 | C: 323-204-7814 | www.cdmsmith.com

Santa Ana Watershed Protection Agency Task Order CDM374 - Triennial Ambient Water Quality Update Budget Status

		Total				CDM Smith (through 6/10)			DBSA (through 5/28)		
Task No	Task Name	Budget	Billed	Remaining	To Complete	Budget	Billed	Remaining	Budget	Billed	Remaining
1	Compute Ambient Water Quality for the Period of 1996 to 2015	227,640	257,462	(29,822)	7,743	123,800	161,366	(37,566)	103,840	96,097	7,743
1a	Data Collection	20,930	133,331	(112,401)		17,530	68,852	(51,322)	3,400	64,479	(61,079)
1b	Update the Physical Model of Groundwater MZs	10,380	2,370	8,010		4,380	2,370	2,010	6,000	-	6,000
1c	Process and Upload Historical Data	65,290	41,218	24,072		58,490	41,218	17,272	6,800		6,800
1d	Develop Groundwater-Quality Point Statistics	12,360	25,111	(12,751)		9,640	25,111	(15,471)	2,720		2,720
1e	Estimate Regional TDS and Nitrate-Nitrogen	69,200	37,213	31,988		31,880	23,815	8,065	37,320	13,398	23,923
1f	Compute Current-Ambient TDS and Nitrate-Nitrogen	49,480	18,220	31,260		1,880	-	1,880	47,600	18,220	29,380
2	Compute Ambient Water Quality for the Period of 1996 to 2015	61,290	2,063	59,228	59,228	18,790	2,063	16,728	42,500	-	42,500
2a	Prepare Change Maps for TDS and Nitrate-N	24,030	-	24,030		2,130	1	2,130	21,900	1	21,900
2b	Perform Key Well Analysis of Water Quality Trends	18,830	-	18,830		2,130	-	2,130	16,700	-	16,700
2c	Perform Well-Attrition Analysis	18,430	2,063	16,368		14,530	2,063	12,468	3,900	-	3,900
3	Prepare Technical Memorandum	25,700	883	24,818	24,818	14,180	883	13,298	11,520	-	11,520
4	Task Force Meetings	35,330	17,489	17,841	17,841	25,130	15,959	9,171	10,200	1,530	8,670
02	Improve the Spatial Distribution of Monitoring	19,200	160	19,040	19,040	13,760	160	13,600	5,440	-	5,440
		369,160	278,056	91,104	128,670	195,660	180,429	15,231	173,500	97,627	75,873

Budget Shortfall -37,566