

Monsanto Enviro-Chem



Monsanto Enviro-Chem Systems Inc.
Corporate Square Office Park
Box 14547
St. Louis, Missouri 63178
Phone: (314) 694-1000

May 24, 1978

RECEIVED JUN 1 1978

Mr. W. T. Sweat, Director
Central Engineering Department
ASARCO, Incorporated
500 Crandall Building
Salt Lake City, Utah 84101

Attention: Mr. M. L. Leary
Reference: ASARCO Order 17H 0711
Subject: EA-26-EP, NY-3954 Plt. 623
MEC Letter No. 2102-229
Variation Order Transmittal
ASARCO File 8

Gentlemen:

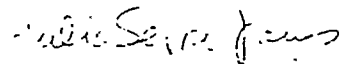
Enclosed please find two copies of variation order No. 22 covering the performance premium paid to Worthington for exceeding their performance guarantees in accordance with the provisions of Purchase Order No. 21-2102.

Since this premium was not part of our original estimate, I am submitting this variation order to adjust the guaranteed maximum only. No additional fee will result from this change.

Please sign one copy of the variation order and return to me by June 5, 1978.

Sincerely,

MONSANTO ENVIRO-CHEM SYSTEMS, INC.



Julio Serra-Jones
Manager, Project Engineering

JSJ:jm
Enclosure

CC: ASARCO

Salt Lake City
W. T. Sweat
A. O. Marsh
W. R. Mahoney

El Paso
R. H. Hunt
W. R. Kelly
W. A. Bennis

MEC
P. Taylor
L. Ewing
P.A. FILE 2102 6.3

PLAINTIFF'S EXHIBIT

ASA-1137

ASARCO ELP 0007995

Monsanto Enviro-Chem

CONTRACT VARIATION ORDER

VARIATION ORDER NO: 22 DATED 5/22/78

TO: CONTRACT BETWEEN MONSANTO ENVIRO-CHEM SYSTEMS INC.

AND ASARCO, Inc.

MONSANTO ENVIRO-CHEM SYSTEMS INC. CONTRACT NO. 2102 DATED

PROJECT	<u>Acid Plant No. 2</u>
LOCATION	<u>El Paso, Texas</u>

The following described variations are authorized and accepted in accordance with Article 12 of general conditions of the contract and the contract is hereby amended accordingly.

This variation order is issued to adjust the contract guaranteed maximum price by two cost of performance premium paid to Worthington which was not part of original contract.

This CVO is issued to adjust guaranteed maximum cost only. No increase in fixed fee will result from this change.

Variation order cost basis	Per Exhibit "B" of Contract
Cost of variation	<u>\$12,185</u>
Effect on contract price	<u>Increases guaranteed maximum by \$12,185</u>
Effect on contract schedule	<u>None</u>

AUTHORIZED:

By Date

ACCEPTED:

MONSANTO ENVIRO-CHEM SYSTEMS, INC.

By *[Signature]* Date 5/25/78

ACID PLANT NO. 2, EL PASO
EFFECT OF VARIATION ORDERS ON CONTRACT COSTS

<u>Variation Order No.</u>	<u>Costs</u>	<u>Engineering Manhours</u>	<u>Work Not Involving Engineering</u>
1. Vertical Coolers	\$ 7,800	311	0
2. Cooling Tower capacity	\$24,400	50	0
3. Cooling Tower Pumps	\$ 9,800	0	0
4. Cooling Tower Vendor	\$37,400	20	0
5. Sales Tax	(\$335,000)	0	0
6. Add UPS System	\$14,100	38	0
7. Increase Control Room Size	\$4,120	129	0
8. Provide Lift System for Main Compressor	\$19,425	130	0
9. Install lead lined elbow		-VOID-	
10. Miscellaneous electrical changes	\$53,940	205	0
11. Storage tank foundations	\$40,000	0	40,000
12. Additional product line	\$17,342	0	17,342
13. Install product acid cooler	\$149,400	600	0
14. Install decolorization system	\$728,500	2,165	0
15. Install mist precip. structure		-VOID-	
16. 98% Acid	\$47,850	430	0
17. Miscellaneous Field Changes	\$ 9,121	34	0
18. Seal Weld & Drain Duct	\$30,000	0	30,000
19. Install 98% Unloading Pipe	\$30,300	224	0
20. Gas Cleaning Plant	*[\$1,357,000]	0	0
21. Underground Piping	8,554	0	8,554
22. Worthington Performance Premium	12,185	0	0
Total	886,525	4336	95,896

* Not included in guaranteed max.

CONTRACT COSTS ADJUSTMENTS:

Adjusted guaranteed maximum: $11,830,800 + 886,525 = 12,717,325$

CONTRACT FEE ADJUSTMENT:

A. Engineering Manhours Adjustment

Engineering manhour current projection:	25,636
Engineering manhour due to variation orders:	4,336
Manhour ratio per Article 12d General Conditions:	0.203
Fee adjustment to date: (790,000) (0.199):	160,812

B. Adjustment For Work Not Involving Engineering

Cost of work to date:	87,342
Fee adjustment per Article 12e General Conditions:	0
Adjusted Fixed Fee: $790,000 + 160,802$	950,812