

ASARCO

Department of Environmental Sciences

December 1, 1980

M. O. Varner
Manager

MOV .. ☒
RDP .. ☒
DAR .. ☒
LDW .. ☒
SGC .. ☒
SDB .. ☒
RCM .. ☒
DLW .. ☒
WCF .. ☒

Mr. C. B. White
Corpus Christi Plant

Confidential Quarterly Monitoring Reports

Enclosed is a copy of the quarterly monitoring summary dated November 10, 1980, for your confidential files.

The status of each job classification exceeding (at a minimum) the action level is marked in pencil. For the most part, this computer printout indicates a record of timely monitoring for job classifications determined to be in excess of the applicable OSHA limits.

Job classifications which need to be monitored to achieve compliance with OSHA regulations appear to include the following:

<u>Department</u>	<u>Job Classification</u>	<u>Monitoring Frequency</u>
Mechanical/Maintenance Yard	Leadburner	Semiannual (Pb)
	Front End Loader	Quarterly (Pb)
	Power Sweeper Operator	Quarterly (Pb)
		Semiannual (As)
	Supervisor	Initial (As)
	Forklift Operator	Initial (Pb)
	Laborer	Quarterly (Pb)
Mill	Beltman	Quarterly (Pb)
Sample	Sampler	Quarterly (Pb)
Zinc Roasters	Front End Loader	Semiannual (Pb)
	Belt Watcher	Quarterly (Pb)
Sulfide Cell	Zinc Dust Helper	Initial (Pb)
	Dross Mill Helper	Initial (Pb)
	Bar Buffer Operator	Quarterly (Pb)
Oxide Leach	2nd Grade Operator	Quarterly (Pb)
	3rd Grade Operator	Semiannual (Pb)
Oxide Cell	Laborer	Initial (Pb)
General	Utility	Initial (As)

Several job classifications have been recently monitored at concentrations which exceed the maximum use limit for negative-pressure half-facepiece respirators. These employees, pursuant to OSHA regulations (29 CFR 1910.1025(f)(2)(i)), must be provided with full-facepiece negative-pressure, air-purifying respirators or with powered air-purifying respirators in the following job classifications:

<u>Department</u>	<u>Job Classification</u>
Yard	Front End Loader Operator Power Sweeper Operator
Sample	Sampler

In addition, engineering or administrative controls must be investigated and instituted if found to be technologically and economically feasible to reduce worker exposures to levels below the OSHA permissible exposure limit.



Lowell D. White, Ph.D.
Senior Environmental Scientist

LDW/bjs
Attach.

cc: PSRandazzo (w/o attach)
KWNelson "
MOVarner "

ASARCO

MON —
TUE —
WED —
THU —
FRI —
SAT —
SUN —
X
X

Department of Environmental Sciences

January 11, 1979

M. O. Varner
Manager

Mr. C. B. White
Corpus Christi Plant

*Industrial
Hygiene Air Sample
Results*

Asbestos Monitoring Results

The filter cassettes sent under your cover letter of December 27, 1978, have been analyzed for asbestos fibers. No fibers were found on any of the filters. The sample for one welder (D.N. Tischler) was dark brown which made it optically impossible to accurately discern or count fibers and, therefore, is not reported on the attached form.

Lowell D. White

Lowell D. White, Ph.D.
Environmental Scientist

LDW/bjs
Attach.

cc: KWNelson (w/o attach)
HLMontague (w.attach)
RMHudson "
MOVarner ✓ "

ASARCO

Department of Environmental Sciences

November 21, 1978

M O Varner
Manager

Mr. C. B. White
Corpus Christi Plant

Asbestos Monitoring Results

In accordance with your request of November 9, 1978, seven personal monitor samples were analyzed for asbestos fibers by the D.O.E.S. laboratory. The results are attached. None of the results exceed the existing nor the proposed OSHA exposure limits.

The OSHA asbestos standard provides that employees be notified of their monitoring results only if the OSHA limit is exceeded. Therefore, a posting form is not included. The OSHA asbestos standard further provides in (i)(2) that employees shall have access to only that portion of the record "which indicates the employee's own exposure to asbestos fibers." In accordance with Mr. W. O. Hart's instructions in his letter of November 8, 1978, the Union representative can have access to only those monitoring results for which he has specific written authorization from the affected employee(s).

Lowell D. White

Lowell D. White, Ph.D.
Environmental Scientist

LDW/bjs
Attach.

cc: KWNelson (w/o attach)
HLMontague (w.attach)
RMHudson "
MOVarner ✓ "

ASARCO

Department of Environmental Sciences

M. O. Varner
Manager

October 10, 1978

Mr. C. B. White
Corpus Christi Plant

*Industrial
Hygiene Air
Sample Results*

Asbestos Sampling Results

The personal monitor samples submitted to D.O.E.S. under your cover letters of September 26 and 29, 1978, have been analyzed for asbestos. The results are attached.

One of the filters (Marroquin) appears to have been tampered with. The filter was scraped, rubbed, and even slightly torn amongst the smudges. It is highly doubtful that this sample is representative of any occupational exposure.

Since none of the sample results are in violation of any OSHA standard, these results need not be posted but should be placed in your confidential files.



Lowell D. White, Ph.D.
Environmental Scientist

LDW/ss
Enclosure

cc: KWNelson (w/o encl)
HLMontague "
MOVarner (w/encl)
RMHudson "



Department of Environmental Sciences

October 2, 1978

M. O. Varner
Manager

Mr. C. B. White
Corpus Christi Plant

Handwritten note:
Personal Monitor
Sample Result

Personal Monitor Sample Result

The analytical result for the personal monitor sample submitted to D.O.E.S. on September 22, 1978, for asbestos analysis is attached. No asbestos fibers were found.

Lowell D. White, Ph.D.
Environmental Scientist

LDW/bjs
Attach.

cc: KWNelson (w/o attach)
HLMontague "
MOVarner (w. attach)
RMHudson "



MCV
200

[Handwritten marks and signatures]

Department of Environmental Sciences

February 6, 1978

M. O. Varner
Manager

Mr. R. M. Hudson
Corpus Christi Plant

Proposed Respirator Program

At your request, the Corpus Christi proposed respirator program has been reviewed and the following comments are offered:

Section I

- a. Delete the 3M 9900 respirator from the list because it does not carry NIOSH/MESA approval for mists but only for toxic dusts. Although air sampling in the cell houses has not indicated any need for mist respirators, the 3M 9910 is approved for both dusts and mists and also is equipped with adjustable straps which should more nearly insure wearing of the respirator in an approved manner.
- b. Suggest including contaminants for which the respirator is approved. Example: (3M 8712 - Black - Organic Vapors).
- c. Because there is no disposable respirator available which is approved for fume, it is recommended that a fume respirator be included in the Section I list for use by welders, lead burners, and other personnel working with molten metal when their type of work may cause excessive fume exposures. The MSA Custom Comfo II with Type S filter, which is presently stocked at Corpus Christi, is approved for dust, mist, and fume.

Section II

- a. Respirator 3M 8712 - Change to read: Respirator 3M 8712 with prefilter #8718.
- b. Respirator 3M 8714 - Change to read: Respirator 3M 8714 with prefilter #8718. Delete Sulfide Cell and Oxide Cell Departments.

- c. Respirator 3M 9900 - Change to read: Respirator 3M 9910.
Delete Roasting and Acid and Maintenance Departments.
- d. Add Respirator MSA Custom Comfo II with Type S filter for
Maintenance Department.

Section IV

This section will have to be changed to reflect the use of a non-disposable fume respirator. The El Paso program requirement of turning-in after each day's use is recommended because these respirators would need to be used only intermittently.

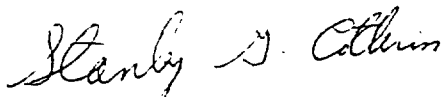
A separate section should be included which lists jobs or operations that require respirator wearing.

OSHA regulations (§1910.134(b)(6)) require that "Respirators shall be stored in a convenient, clean, and sanitary location." This requirement should be included in the written program and stressed in the training sessions.

On Section II.C.1 of the training session, delete 3M 9900 and add MSA Custom Comfo II.

Brochures on the 3M 9910 respirator and #8718 prefilter are attached.

Your effort in preparing and implementing this program is appreciated.


Stanley G. Cothrin
Environmental Scientist

SGC/bjs
Attach.

cc: CBWhite (w/o attach)
KWNelson "
MOVarner ✓ "

ASARCO

Corpus Christi Plant

January 9, 1978

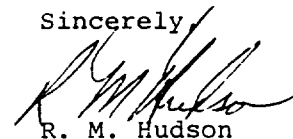
Robert D. Putnam, M.D.
Supervisor of Technical Services
ASARCO Incorporated
3422 South - 700 West
Salt Lake City, Utah 84119

Dear Dr. Putnam:

As per telephone conversation with Mr. Klenke of the Personnel Office on January 6, 1978, attached is the Corpus Christi plant's proposed respirator program for your review and comments. Please note that a brochure for the 3M 9910 respirator is not available.

Thank you for your prompt attention to this matter.

Sincerely,



R. M. Hudson

DMK/gw

ANZ 0004153

RESPIRATOR PROGRAM - CORPUS CHRISTI PLANT

- I. The following air-purifying-disposable respirators are approved for use in the Corpus Christi Plant:

3M	8712	Black
3M	8714	White
3M	9900	Yellow
3M	9910	

The above respirators are NIOSH approved. All other respirators must be discarded.

- II. Following is a list by department of acceptable respiratory protection:

	<u>Department</u>
<u>Respirator</u> - 3M 8712	Maintenance - Painters
<u>Respirator</u> - 3M 8714	Roasting and Acid Sulfide Cell Oxide Cell
<u>Respirator</u> - 3M 9900	Yard Roasting and Acid Sulfide Leach Sulfide Cell Oxide Leach Oxide Cell Utilities Maintenance

- III. Maintenance employees and others entering these departments should have the appropriate respirator for the department in which they will be working if needed.
- IV. The above respirators are the disposable type and are to be replaced whenever warranted.
- V. Air-purifying, half-mask respirators will not be worn for protection in baghouses during times when baghouses are being cleaned. Air line hoods provided by the departments must be used during these times.
- VI. Respirators must be periodically tested for proper seal and fit. Appropriate use of respirators and their limitations are to be stressed during training sessions conducted by the safety representatives and department supervisor, or his designated representative.
- VII. Beards and facelets are not permissible because they do not permit a proper seal.

ASARCO

Department of Environmental Sciences

M. O. Varner
Manager

September 27, 1978

Mr. C. B. White
Corpus Christi Plant

*Industrial
Hygiene Air
Sample Results*

*COPIED BSS
10-3-78
this letter
only for use
to*

Erratum in My Letter of September 25, 1978
Asbestos Sampling Results

In this letter, I discussed several regulations pertaining to requirements which employers must follow during teardown operations where there might be an asbestos exposure. Dr. R. D. Putnam questioned whether my reluctant conclusion that "perhaps the provision of the disposable suits" would be required to avoid citations. I had failed to note any triggering level for the clothing requirement in section (c) and had so concluded. I had failed to note that 1910.1018(c)(2)(iii) stated that provision of the special clothing was to be done "in accordance with paragraph (d)(3) of this section." The very last phrase in (d)(3) states that special clothing is required only at concentrations of airborne asbestos "which exceed the ceiling limit." Therefore, special clothing must be provided only when the 10 fibers/cc level is exceeded and, since the highest of the monitoring results was only 0.26 fibers/cc, management in this situation did not need to nor were they required to provide special clothing to these workers. It was a nice courteous gesture on the part of management.

Lowell D. White

Lowell D. White, Ph.D.
Environmental Scientist

LDW/ss

cc: KWNelson
MOVarner
RMHudson

ASARCO

Department of Environmental Sciences

M. O. Varner
Manager

September 25, 1978

Mr. C. B. White
Corpus Christi Plant

*Industrial Hygiene
Air Sample
Results*

COPIED 9-26

*BTS
pls copy in
work
mm*

Asbestos Sampling Results

The results for the personal monitor samples recently taken in the roaster building during teardown operations have been reported by the D.O.E.S laboratory and are enclosed for your confidential files.

It may be noted that most of these samples are short-term samples taken during potential peak exposure periods, and yet, the sample results are more than 50 times lower than the OSHA ceiling limit. These sample results show that potential worker exposures during these work activities are in complete compliance with OSHA regulations.

However, due to the fact that these samples show that some asbestos fibers may be present at some potentially measureable concentration, 1910.1001(c)(2)(iii) requires that the company nevertheless must provide the workers with respiratory protection and "... with special clothing in accordance with paragraph (d)(3) of this section" whenever such workers are dealing with the "... removal, or demolition of pipes, structures, or equipment covered or insulated with asbestos, etc." The regulation does not mention any triggering concentration for this requirement. Also, 1910.1001(c) requires in several subsections that wetting and other means be used during all operations involving asbestos to assure that the OSHA exposure limits are not exceeded. Based on these regulations, it would seem prudent to continue to require the use of respirators and wetting techniques during these operations and perhaps the provision of the "disposable suits" so that citations for these paragraphs can be avoided.

According to the OSHA regulations, these results need not be reported to the workers. Access should be permitted only upon receipt of permission from Mr. W. O. Hart in New York.

In the G.A.F. court case it was ruled that annual medical examinations must be provided to all workers exposed to "measurable"



AMERICAN SMELTING AND REFINING COMPANY

DEPARTMENT OF ENVIRONMENTAL SCIENCES

3422 SOUTH — 700 WEST, SALT LAKE CITY, UTAH 84119

M. O. VARNER
Manager

July 12, 1974

CONFIDENTIAL

Mr. C. B. White
Corpus Christi Plant

I am enclosing the results of the personal monitor samples taken during the recent OSHA inspection of the plant. You will recall that these samplers were placed on the same individuals that the OSHA compliance officers monitored during their inspection. Because we were limited in the number of samplers we were able to assemble on such short notice, I could not duplicate all of their sampling efforts. There were approximately four individuals for which duplicate samples were not obtained. It is reassuring to know that none of the samples were found to exceed the current OSHA standards for cadmium, zinc, lead and respirable dust.

Robert D. Putnam, Ph.D.
Supervisor of Technical
Services

RDP/nrh
Encl.

cc: RHudson
HLMontague
KWNelson
AJGillespie/JPStetson
Dr. CHHine
RCBeckstead
MOVarnier ✓

ANZ 0004157

PERSONAL MONITOR RESULTS
OSHA INSPECTION --- CORPUS CHRISTI PLANT

<u>Department</u>	<u>Employee and No.</u>	<u>Job or Operation</u>	<u>Sampling</u>		<u>Ele- ment</u>	<u>Conc'n. (mg/m³)</u>
			<u>1974 Date</u>	<u>Time (min.)</u>		
Oxide Cell	J. A. Silva #559 (no respirator worn)	Caster Helper	6/18	360	Cd	<0.01
					Pb	0.07
					Zn *	0.01
Stripping Floor	Fred Flores #175 (no respirator worn)	Stripper	6/18	320	Cd	<0.01
					Pb	<0.01
					Zn	0.05
Cadmium Casting	Jose M. Ramirez #423 (no respirator worn)	2nd grade Operator	6/18	320	Cd	0.05
					Pb	<0.01
					Zn	<0.01
Cadmium Casting	Pete Perez #1529 (no respirator worn)	Leadman	6/18	315	Cd	0.01
					Pb	<0.01
					Zn	<0.01
Oxide Casting	Frank Mendez #1458 (no respirator worn)	Caster	6/18	310	Cd	<0.01
					Pb	<0.01
					Zn	0.59
Oxide Grinding	G. Martinez #1414 (respirator worn when inside building)	2nd grade Operator	6/18	375	Cd	<0.01
					Pb	<0.01
					Zn	0.12
					Total Par- ticulates	1.3 mg/m ³
Oxide Cell House	Matias Garcia # (no respirator worn)	Leadburner 1st Class	6/18	420	Cd	<0.01
					Pb	0.17
					Zn	0.04
Oxide Cell	Eoisteo Martinez #1541 (no respirator worn)	Caster	6/19	400	Cd	<0.01
					Pb	0.12
					Zn	<0.01
Sulfide Cell Casting	Oscar Salazar #490 (no respirator worn)	3rd grade Operator	6/19	387	Cd	<0.01
					Pb	0.01
					Zn	0.48
Cadmium Stripping	R. Herrero # (no respirator worn)	Relief Helper	6/19	415	Cd	0.04
					Pb	<0.01
					Zn	<0.01

* Represents total Zn by atomic absorption analysis.
Amount attributable to ZnO fume was not determined.

OSHA 8-hour time-weighted average:

Pb = 0.20 mg/m³

Cd fume = 0.1 mg/m³

Cd dust = 0.2 mg/m³

ZnO fume = 5 mg/m³

Inert or
Nuisance dust
(respirable
fraction) = 5 mg/m³



MOV ☒
PDP ☒
EGU ☒
SDB ☒
RCM ☒
DAP ☒
WC ☒

Department of Environmental Sciences

M. O. Varner
Manager

Mr. C. B. White
Corpus Christi Plant

*Industrial Hygiene
Air Sample
Plan 11.0*

March 22, 1977

*COXED
3 22 77
BTS
RCB
DHS/LIAK
RCB
1711*

Attached are the results of air samples for airborne asbestos fibers obtained in the oxide casting department on February 23, 1977.

These samples were obtained on three employees who were relining furnace launders with asbestos cloth and were taken concurrently with OSHA samples on the same employees.

The first sample of fourteen minutes duration on each employee included removing the old asbestos liner, placing the old liner in a bag and cutting new asbestos cloth. The second sample of fifteen minutes duration included placing asbestos cloth in the launder and mudding it in. Because the samples include the entire time that the employees worked with asbestos on February 23, their 8-hour time-weighted average exposure (TWA) was:

Balboa	-	0.02 fibers/cc
Silva	-	0.03 fibers/cc
Villareal	-	0.03 fibers/cc

All sample results were below the OSHA 8-hour TWA limit of 2 fibers/cc.

Because the sample results were well below the OSHA limit, repeat semi-annual monitoring need not be performed unless there is reasonable cause to believe that the airborne concentrations of asbestos have changed. Also, it is our understanding that current OSHA policy requires employee medical examinations only when their 8-hour TWA exposure exceeds 0.1 fibers/cc. Since the sample results indicate exposures below this level, OSHA should not require medical examinations.

Stanley G. Cothrin
Stanley G. Cothrin
Environmental Scientist

SGC/ms
Attachments

cc: RMHudson (w/attach.)
KW Nelson "
MO Varner "

ASARCO Incorporated 3422 South 700 West, Salt Lake City, Utah 84119 (801) 262-2459

ANZ 0004160

ASARCO

MOV _____
 ROP _____
 LDW _____
 SGC _____
 SDB _____
 OAR _____
 WF _____

Department of Environmental Sciences

M. O. Varner
 Manager

February 17, 1977

Mr. C. B. White
 Corpus Christi Plant

During my visit to Corpus Christi on January 21, 1977, I sampled several departments in the plant where asbestos was being used to determine whether the plant was in compliance with the OSHA regulation for asbestos. The results of the sampling are as follows:

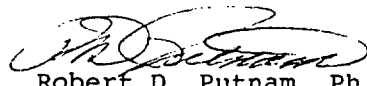
Department	Name Employee No.	Job Title (Resp. Use)	1977 Date & Shift	Samp- ling Time (Min.)	Asbestos Conc'n. Fibers/cc >5 Micron
Oxide Casting	J. Gonzales # 1667	Machine Caster No	1/21 D	16	1.1
	Stationary Above launders' crossover	---	1/21	30	1.1
	Sterling Goehring	Casting Foreman No	1/21	2	<.5
	"	"	"	2	<.5
Utility Plant Tool Room	Stationary Sample	---	1/21	65	.02
Sulfide	B. Gonzales # 1539	Machine Caster Debasing Unit No	1/21	28	<.04
Maintenance	F.M. Lytle #1560	1st Class Bricklayer No	1/21	16	.68
	Kelso 1530	Bricklayer Apprentice	1/21	20	1.0

Although all of the results were within the OSHA limit of 2 fibers/cc, a few steps will have to be taken in order to bring the plant into compliance. These include:

1. Additional monitoring will have to be conducted on every employee within the Oxide Casting Department, Sulfide Debasement Unit and the Maintenance Bricklayers' Shack. If the sampling indicates that the asbestos levels are above 1 fiber/cc, then resampling must be performed at least every six months. This sampling should be done at the time the asbestos cloth is removed and installed in the launders and during normal operation.
2. Caution labels must be affixed to all products containing asbestos or to their containers. Instructions on this are being prepared by the New York office and will be issued in the near future.
3. All asbestos waste, scrap, debris, etc. is currently being disposed of in impermeable bags or containers, but a label must be placed on the bag indicating that the contents contain asbestos.
4. The plant must maintain records of all air sampling conducted at the plant.
5. All employees exposed to asbestos fibers, regardless of how nominal the exposure may be, must have pre-employment, annual and employment termination physical examinations.

In view of the fact OSHA will soon be coming into the plant to take asbestos samples, it would be wise to implement items 1-4 above as soon as possible. The medical examinations will have to be delayed until we can obtain an accurate list of all employees affected by the regulation. This can be done by conducting an extensive sampling program in all areas where asbestos is being used. We can provide Roy Hudson with the necessary equipment or we can send a representative from D.O.E.S. to conduct the survey.

I will be in Corpus Christi next week and we can discuss a sampling program at that time.


Robert D. Putnam, Ph.D.
Supervisor of Technical
Services

RDP/ms

cc: RMHudson
KWNelson
MOVarner✓

ASARCO

Corpus Christi Plant

MOV ... ☒
PDF ... ☒
LDW ... ☒
DLW ... ☒
SGC ... ☒
SDB ... ☒
RCM ... ☒
DAR ... ☒
WCF ... ☒

December 14, 1979

Dr. Charles H. Hine
Medical Director
ASARCO Incorporated
7604 Rincon Annex
San Francisco, California 94120

Dear Dr. Hine:

Re: Ramiro J. Lopez, #307

The above mentioned employee has recently had his yearly asbestos physical, and has requested that a copy of the complete physical be sent to his family physician, Dr. Manuel Ramirez.

Please advise us what action should be taken regarding this request.

Sincerely,

C. B. White

RMH/gw

cc: M. O. Varner /



ANZ 0004163