



Chen

Administrative Services Group
100 Matsonford Road
Radnor, Pennsylvania 19087

September 14, 1978

PLAINTIFF'S EXHIBIT

SUN-263

Mr. Cecil Callahan
Centaur Management Consultants, Inc.
Suite 465
1120 Connecticut Ave., N.W.
Washington, D.C. 20036

Dear Mr. Callahan,

Attached is cost information associated with respiratory programs in our domestic refineries. Please feel free to call with any questions.

Sincerely,

A handwritten signature in cursive script, reading "J. M. Haas".

Jonathan M. Haas
Employee and Environmental
Health and Safety Services

JMH/emk

cc: J.F. Naber

S 0863

(1) What type or types of respirators are you currently using?

Our 5 domestic refineries use the following

- A) Self-contained breathing apparatus - full face piece
- B) Supplied air respirators, airline - full face piece
- C) Supplied air respirators, hose mask with blowers - full face piece
- D) Supplied air respirators, abrasive blasting - helmet and hood
- E) Air purifying - cannister - full face piece
- F) Air purifying - cartridge - full face piece
- G) Air purifying - cartridge - half mask
- H) Air purifying - dust, disposable - half mask
- I) HF Alkylation Hoods

- What are the individual costs of these devices?

- A) \$575 to 617
- B) \$110 to 299
- C) \$1050
- D) Not available
- E) \$130
- F) \$50
- G) \$11 - \$13
- H) \$0.72 to \$0.85
- I) Not available

- How many of each type are currently in use? What is their service life?

	<u>Refinery 1</u>	<u>Refinery 2</u>	<u>Refinery 3</u>	<u>Refinery 4</u>	<u>Refinery 5</u>	<u>Yrs. Life</u>
A)	42	26	16	12	71	5-10
B)	18	48	0	0	24	2-15
C)	10	2	8	4	9	10
D)	2	6	1	2	1	10
E)	100	18	12	10	5	2-5
F)	0	24	0	0	12	2-5
G)	750	440	270	36	665	4-2
H)	500	200	1200	720	500	0
I)	0	0	20	16		

- What is the service life of the filters, cartridges, cannister?

Single use - one day only

- What is the service life of other replaceable parts?

Inhalation valves, exhalation valves, exhalation valve cover, elastic headband, cartridge gaskets - replaced as needed following daily inspection, usually replaced 2x per year.

- What are the cost of the replaceable parts?

Inhalation valve	MSA	\$0.44	Exhalation valve cover	MSA	\$0.7	
	A.O.	\$1.95		A.O.	\$0.5	
	Welch.	\$1.10		Welch.	\$0.6	
Exhalation valve	MSA	\$0.77	Headband	MSA	\$2.1	
	A.O.	\$1.78		A.O.	\$1.7	
	Welch.	\$2.15		Welch.	\$2.1	
Cartridge gasket	MSA	\$0.55				
	A.O.	\$0.45				
	Welch	not needed				
Cartridges	-					\$3.56
Cannisters	-					\$15.00

(2) What is the total level of staff time devoted to administrations, maintenance and monitoring of your respirator program? For example:

--Program administrators time to set up program, monitor worker use of respirators, evaluate overall effectiveness of program, etc

Per refinery one-time

NIOSH 593 Course "Occupational Respiratory Protection"	32 hr
Program Creation	215 hr

Per refinery, on-going per year

Monitor worker use of respirators	40 hr
Evaluate over-all effectiveness	10 hr

- Workers time to inspect respirator, replace worn parts, clean, etc?

Per respirator:

Inspect - 1 minute
 Replace cartridges - 1 minute
 Clean respirators - 5 minutes
 Bagging & tagging & recordkeeping - 2 minutes

(3) What is the amount of time devoted to training employees in respirator usage? For example:

-- Amount of training time per employee?

30 minutes air purifying
 40 minutes air supplied

-- Total time of respirator program devoted to training?

Per refinery - 120 hours minimum

-- Fit testing time, per employee

20 minutes

S 0865