TEXACO U. S. A. HOUSTON
ENVIRONMENTAL AND HEALTH
DEC 14 '82

FJB	✓	CHM		
RGM		FCH		
ERK	✓	DWM		
CWD		CFH		
MLM		BJS	✓	25
JFY	✓	SECY		
JJG				

SAF-IH-PSP-(SA)

COPY

Houston, Texas
December 14, 1982

SAF STUDIES, SURVEYS & REPORTS
Texaco USA
Puget Sound Plant
Asbestos Sampling - Area

PLAINTIFF'S EXHIBIT

TEX-71

Mr. C. R. Ferguson
Anacortes, WA

Area sampling to evaluate airborne asbestos levels was conducted at the Puget Sound Plant on October 5 and 8, 1982, by Mr. W. A. Rosenberg. The samples were representative of the airborne concentration during asbestos insulation stripping procedures at the Crude - Vacuum Pipe Still Unit. None of the results were found to exceed 0.1 fibers per cubic centimeter (f/cc), and therefore, the levels were well below the State occupational exposure standard as discussed herein.

RESULTS AND DISCUSSION

According to Federal and State OSHA, environmental (area) samples shall be collected from areas which are representative of the airborne concentration which may reach the breathing zone of employes. Such sampling shall be conducted at no more than six-month intervals where exposures may be foreseen to exceed the permissible exposure limit of 2 f/cc averaged over an eight-hour day or a 5 f/cc ceiling limit.

Four area samples were collected with the results ranging from less than 0.01 to 0.06 f/cc calculated as an eight-hour time weighted average (TWA). It was noted that the contractors were wearing approved air purifying respirators during the stripping operation on the vacuum and atmospheric towers. The results are listed in the attached Table I. Basis these results, no airborne contamination was evident and the levels were well below the State exposure standards.

The samples were collected on open face AA filters using calibrated high flow DuPont and Bendix air sampling pumps. Subsequent analysis was performed by the National Loss Control Service Corporation, an accredited industrial hygiene laboratory.

Please contact Mr. J. D. Watts in our office if there are any questions or comments concerning this report.

Signed: O. W. RIGDON

O. W. RIGDON

JDW
blh:A/e
Attachment
UVH
FJB

WA-TEX005046

TABLE I

PUGET SOUND PLANT

ASBESTOS

AREA SAMPLES
10/05/82 - 10/08/82

SAF - STUDIES, SURVEY AND REPORTS
TEXACO USA
PUGET SOUND PLANT
ASBESTOS
TABLE 1 OF 1
PAGE 1 OF 1
REPORT DATE- DEC 14 1982

SAMPLE NUMBER	DATE	WORK AREA	WIND SPEED	TEMP (F)	TIME	ANALYSIS RESULT*	ADJUSTED CONCENTRATION*	METHOD**
6203000286	10/05/82	CRUDE UNIT	11 TO 20 MPH	55	297	0.0500 F/CC	297 0.05 F/CC	8 HR-SAME
6203000287	10/05/82	CRUDE UNIT	11 TO 20 MPH	55	300	$ 0.0100 F/CC	300 $ 0.01 F/CC	8 HR-SAME
6203000290	10/08/82	CRUDE UNIT	11 TO 20 MPH	50	333	0.0600 F/CC	333 0.06 F/CC	8 HR-SAME
6203000291	10/08/82	CRUDE UNIT	11 TO 20 MPH	50	321	0.0500 F/CC	321 0.05 F/CC	8 HR-SAME

* $ = LESS THAN THE DETECTABLE LIMIT
¢ = ROUNDED TO THE NEAREST HUNDREDTH
B = BREAKTHROUGH
// = ADJUSTED CONCENTRATION EXCEEDS THE STANDARD

** SAME = THE ADJUSTED CONCENTRATION WAS COMPUTED BASED ON ASSUMED SAME EXPOSURE DURING THE BALANCE OF THE UNSAMPLED TIME.
ZERO = THE ADJUSTED CONCENTRATION WAS COMPUTED BASED ON NO SIGNIFICANT EXPOSURE DURING THE BALANCE OF THE UNSAMPLED TIME.

WA-TEX 005048

WA-TEX005047