PLAINTIFF'S EXHIBIT EXX 148
PENGAD-Bayonne,N.J.

Baton Rouge, Louisiana
Petroleum Products Laboratory
March 9, 1955

MEMORANDUM

On March 2, 1955 Dr. J. E. Miller, Mr. F. S. Venable and Dr. W. C. Albert met with Dr. Chopin and Dr. West of Kam-Tech Laboratories to discuss the atmospheric survey work performed by Kam-Tech for Esso. The current contract between Esso and Kam-Tech expires April 1, 1955. Data accumulated during 1953 and 1954 were reviewed. Sets of plots superimposed on refinery maps to show the effect of wind direction on concentration of contaminants were used as a basis for discussion. A set of these plots is attached. Also attached is an up-to-date summary of average concentrations of various contaminants compared to commonly used standards and values reported in areas where air pollution has been a problem.

This review did not bring out anything to change the conclusions reached in our last review in August, 1954. A copy of the earlier review is attached.

It was concluded that the data we now have are sufficient to show that we have no serious air pollution problem; however, the general feeling is that there should be a continuing program to keep our data current. It was agreed that the frequency of samplings of the type we are now making (i.e. at the sample points we have been using) could be reduced, say to once a month rather than twice a month as called for in the present contract. This would cut the program approximately one-half. As a substitute for the portion of the program eliminated it was proposed that one day each month be given to an attempt to locate sources of contamination. Details have not been worked out yet, but the general idea is to make one or two traverses of the refinery in a direction perpendicular to the wind, taking samples and looking for qualitative evidence of any contamination. If any contamination is found, an attempt will be made to follow it to the source and to define the limits of the area affected within the refinery. If the contamination is severe, determinations would also be made at the point where the contamination leaves the refinery boundaries.

Dr. West reported that he had developed an excellent method for aldehydes. Mr. Venable expressed interest in this and it was agreed to add determination of aldehydes to the program.

It was agreed that the present corrosion program is not well designed. A modified program of approximately the same scope will be worked out with the help of the Equipment Inspection Department. The present program includes tests on automobile finishes; consideration will be given to inclusion of house paints in the modified program.

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Attachments

Contaminant	Found in Refy. Atmosphere April, 1953 - Dec., 1954 Max.	Ave.	Control Point 3161 E. Blvd. Ave.	MAC(1)	Con
Dust Count (Million Particles/m.^{3})	46(2)	9.1	5.5		180 63. 70
Dust Fall, Tons/sq. mi./mo.(3)	55(4)	23	-		92. 35.
Ammonia (As NH_4+), mg./m.^{3}	.25	0.022(5)	0.0	100 ppm as NH_3	
Chlorides, mg./m.^{3}	2.5	0.075	0.0	-	0.0
Chlorine, ppm.	1.2	0.054	0.0	1	0.0 0.0 0.0
H_2S, ppm.(6)	0.20	0.058	<0.050	20	-
SO_2, ppm. (6)	8.8	0.019	0.0	10	0.0 0.0

(1) Maximum Allowable Concentration (8 hour day, 5 day week)
(2) One value. Next highest 2.2
(3) Figures for period Nov. 9 to Dec. 29, 1954. Previous data questionable.
(4) High value in Northwest Corner, adjacent to Solvay.
(5) Equivalent to 0.0003 ppm. as NH_3.
(6) 1954 only. Analytical methods changed at about Jan. 1, 1954.

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Baton Rouge, Louisiana
Petroleum Products Laboratory
March 11, 1955

Contaminant	Found in Body. Atmosphere April, 1953 - Dec., 1954 Max.	Ave.	Central Point 3161 E. Blvd. Ave.	MAC(1)	Concentrations Reported in Various Localities Concentration	Location	Comment
Dust Count (Million Particles/m.^{3})	46(2)	9.1	5.5		240 63.5 70 to 700	Congested Municipal Areas Urban Residential Areas Industrial Locations	From "Industrial Dusts"- Decker and Hatch
Dust Fall, Tons/sq. mi./mo.(3)	55(4)	23	-		98.2 35.9	Windsor - Detroit Windsor - Detroit	Areas of Heavy Pollution Areas of Low Pollution
Ammonia (As NH_4+), mg./m.^{3}	.25	0.022(5)	0.0	100 ppm as NH_3		-	-
Chlorides, mg./m.^{3}	2.5	0.075	0.0	-	0.00 to <0.30	Donora, Pa.	90% of Samples <0.
Chlorine, ppm.	1.2	0.054	0.0	1	0.04 0.055 0.04	Donora Cincinnatti Cincinnatti	- Business-Industrial Area Residential Area
H_2S, ppm.(6)	0.20	0.058	<0.050	20	-	-	-
SO_2, ppm. (6)	8.8	0.019	0.0	10	0.01 to 0.49 0.50 to 3.16	Various large Cities in U.S. Averages Chicago	Mfg. Districts, 1937.

(1) Maximum Allowable Concentration (8 hour day, 5 day week)
(2) One value. Next highest [illegible]
(3) Figures for period Nov. 9 to No. 29, 1954. Previous data questionable.
(4) High value in Northwest Corner, adjacent to Solvay.
(5) Equivalent to 0.0003 ppm. as NH_3.
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