Monsanto

FROM (NAME & LOCATION) J. J. Vick - Industrial Engineering - Pensacola

DATE February 3, 1971 cc:

SUBJECT POLYCHLORINATED BIPHENYLS

REFERENCE

Dr. Thomas Duke - provided info this

TO :

B. T. Dean
J. E. Lipe
J. A. Sauer
S. L. Walters
R. M. Warner

This is a summary of information received from Dr. Tom Duke at the Pesticide Laboratory on February 3, 1971.

Dr. Duke has established sampling stations in the Escambia River and in the local bays. These stations are indicated by Roman Numerals on the attached maps. Each numeral represents a line along which three sampling points have been established, one near each end and one at the mid-point of each line.

STATION I is located north of the plant where the White and Escambia Rivers separate.

STATION II is at our outfall; STATION II-A is just a few yards below our outfall.

STATION III is at the Highway 90 Bridge.

STATION IV is in northern Escambia Bay and the mid-point sample could be considered as a river mouth sample.

STATION V runs along a line due east from Bohemia in lower Escambia Bay.

STATION VI is a line running southeasterly from White Point across East Bay; STATION VI-A is an east-west line where Blackwater Bay and East Bay meet.

STATION VII is parallel to and just east of Pensacola Bay Bridge.

STATION VIII is parallel to and just west of the Santa Rosa Sound Bridge to Pensacola Beach.

STATION IX is at the mouth of Pensacola Bay.

Attached are two tables, one giving the results of PCB analyses of water; the other bottom sediment samples. The water analyses represent composite samples made up of three individual samples taken near each end and at the mid-point of the above sample stations. Duplicate composites were made for water samples taken near the top, as well as near the bottom in each case. Sediment samples represent the top one to three inches of the bottom.

Core samples of the bottom to a depth of eighteen to twenty-four inches were also analyzed by Dr. Duke, and in most cases the upper portion of these cores agreed well with the other sediment analyses. In each case, except at the mid-point of sample Station IV, PCB content decreased with depth and was generally non-detectable in the lower portion of the cores. At Station IV PCB increased with depth for the first foot, more or less, and then decreased in the lower portion; a high value of 21 ppm was noted.

Routine sampling of oysters in Escambia Bay near the eastern end of sample Station V and just off White Point in East Bay showed a maximum PCB content of 1.9 ppm with the latest values less than 0.5 ppm; this may be normal seasonal variation and Dr. Duke believes that the PCB content of oysters has plateaued.

Analyses of muscle from croaker and menhaden taken from Bayou Texar indicated a PCB concentration slightly in excess of 7 ppm. There was one analysis for each of the two species. There are apparently other analyses indicating levels less than the FDA 5 ppm action level, and it is probable that the FDA has taken samples for analyses.

It is Dr. Duke's intention to monitor every three to six months the PCB levels at each of the sampling stations plus two additional stations to be established in Santa Rosa Sound.

J. J. Vick

JJV:gj

atts.

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SEDIMENT (ppm)

	East to West	or	South to North
	1	2	3
I	0.32***	N.D.*	N.D.
II	55	0.039	4.0
II-A	1.9	-	-
III	18	0.21	0.42
IV	1.0	7.2	1.4
V	0.071	0.3	0.23
VI	N.D.	0.15	0.082
VI-A	0.13	0.10	N.D.
VII	N.D.	0.17	N.D.
VIII	N O	D A T A	
IX	N.D.	N.D.	N.D.
X	**		
Big Sabine	**		

*ND for sediment is < .01ppm

**Additional stations to be established in Santa Rosa Sound

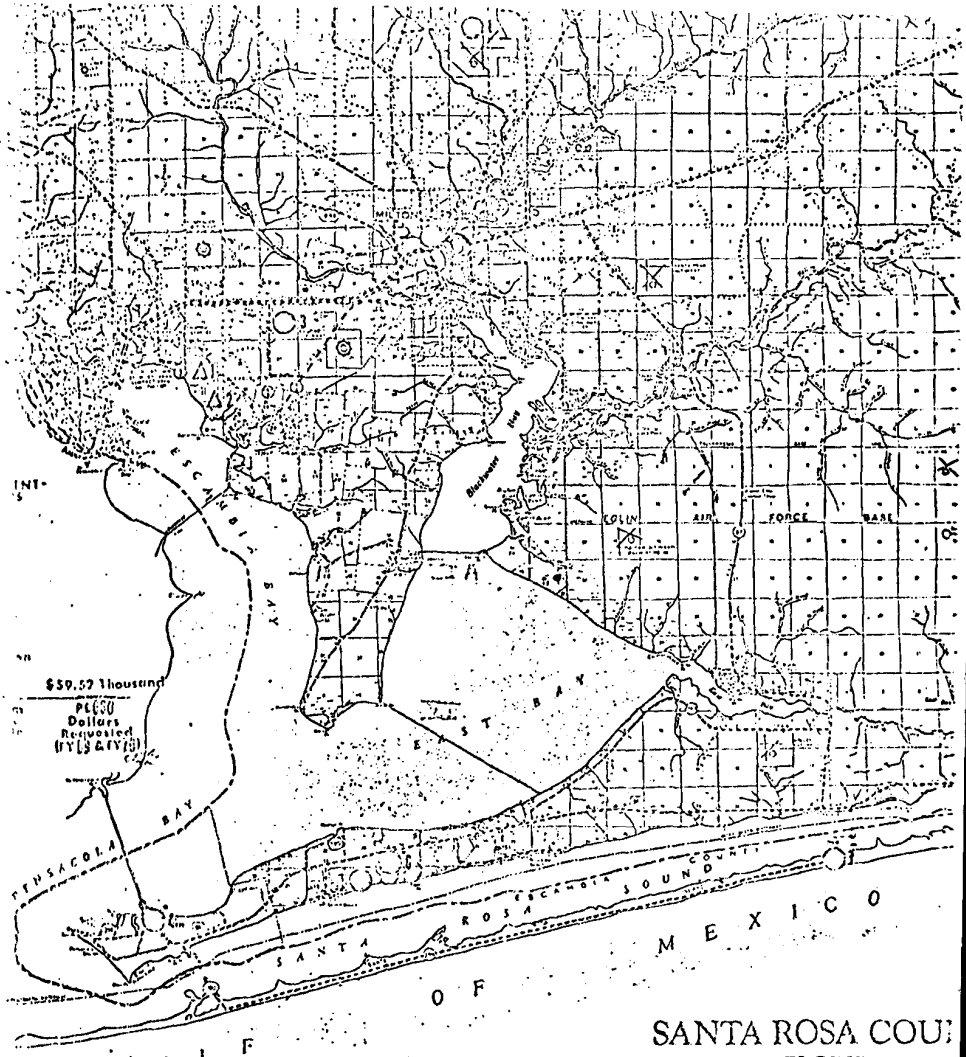
***Presence of 1254 confirmed by resample, but tests of samples taken 1 mile further up stream were negative.

WATER (ppB)

	TOP	BOTTOM
I	N.D.* N.D.	N.D. N.D.
II	0.4 0.3	0.2 0.2
50 Yds. Below II	0.6 0.4	N.D. N.D.
100 Yds. Below II	0.06 0.2	N.D. N.D.
III	TR.** TR	0.1 0.08
IV	TR TR	TR TR
V, VI, VII and IX	N.D. N.D.	N.D. N.D.

*N.D. for water is < 0.03 ppB

**TR. for water is 0.03 to 0.05 ppB



SANTA ROSA COU
FLORIDA

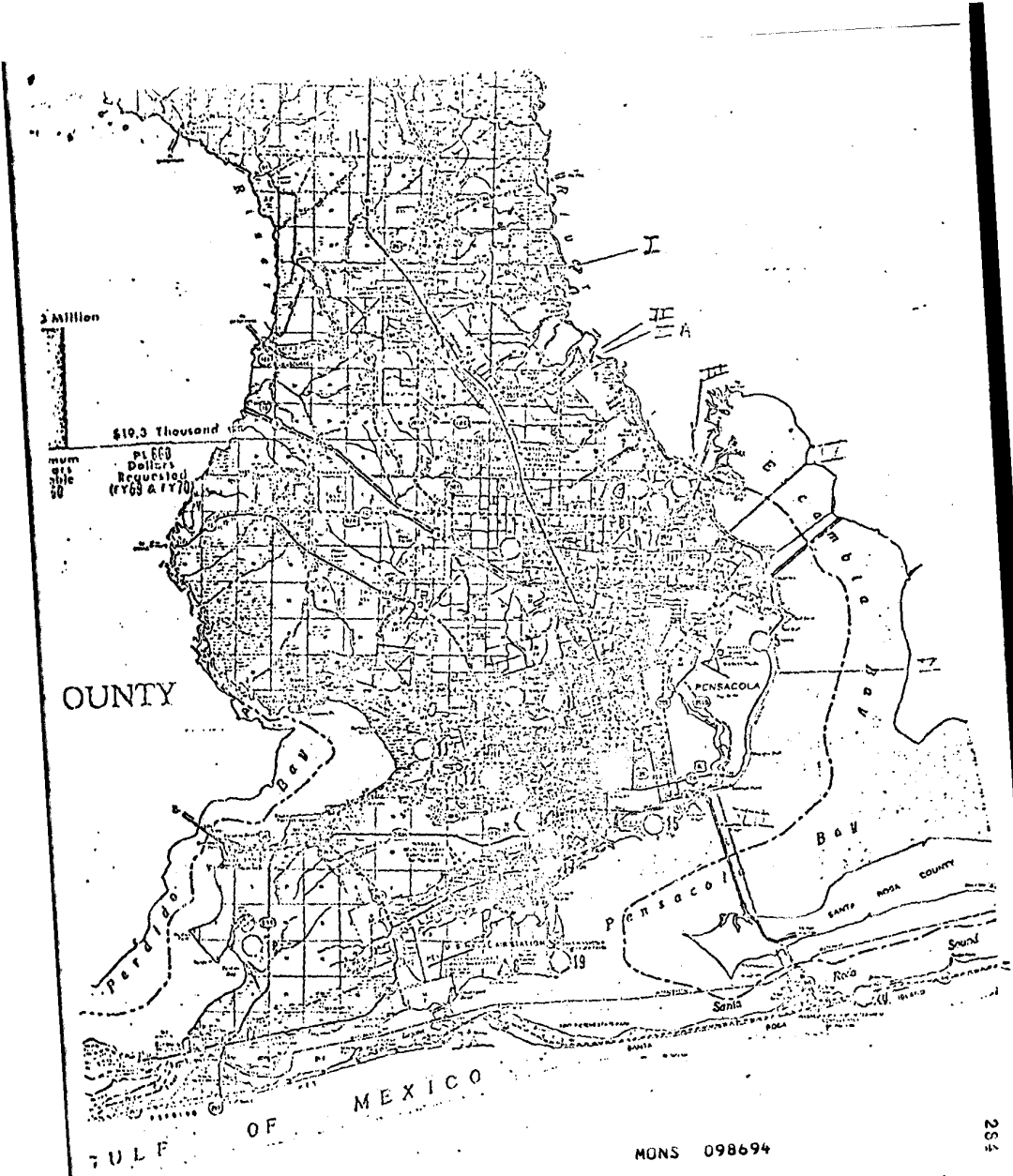
SEWAGE TREATMENT INSTALLATIONS

- ON-SITE DISPOSAL
- DISCHARGE TO RECEIVING STREAM
- INSTALLATIONS UNDER CITATION

INDUSTRIES UNDER CITATION

DAWFC
1778

MONS 098693



3 Million
$19.3 Thousand
PL 660
Dollars
Requested
(FY69 & FY70)
OUNTY
I
II
II A
III
IV
V
PENSACOLA
Pensacola Bay
Perdido Bay
Santa Rosa Sound
SANTA ROSA COUNTY
GULF OF MEXICO

MONS 098694