Monsanto

FROM (NAME & LOCATION): E. S. Tucker - R&D Laboratories - South Second Street

DATE: October 8, 1969

SUBJECT: ELECTRON CAPTURE GAS CHROMATOGRAPHIC ANALYSIS OF ANNISTON WATER AND SEDIMENT SAMPLES FOR POLYCHLORINATED BIPHENYLS

REFERENCE:

cc: M. W. Farrar - Res. 1
R. E. Keller - Res. 1
W. R. Richard - GO
E. P. Wheeler - GO

TO: E. G. Wright
Anniston Plant

RESULTS

Sample Description		Aroclor and Amount Found 1242	1248	1260
Snow Creek, Glen Eddie	- Water	23.3ppb	-	-
Snow Creek, Glen Eddie	- Sediment	2.36%	-	-
Choccolosso Creek Above Confluence with Snow Creek	- Water	8.1ppb	-	-
	- Sediment	78.0ppb	-	-
Choccolosso Creek Jackson Shoals	- Water	5.8ppb	-	-
	- Sediment	-	3.62ppm	3.68ppm
City Treatment Plant	- Water	<2.0ppb	-	-
	- Sediment	-	527ppm	211ppm
Eureka Bridge	- Water	<2.0ppb	-	-
	- Sediment	-	1.36ppm	1.88ppm
Dust Scrubber	- Water	<2.0	-	-
	- Sediment*			

*Loaded $\bar{c}$ every possible PCB plus significant amounts of chlorinated terphenyls.

I do not feel that a large amount of significance can be attached to samples containing less than 10 ppb Aroclor 1242. From time to time we have had contamination problems in our laboratories at this level when equipment was not properly cleaned before use.

It would be of help to us if the following standardized sampling procedures are employed.

Sediment

Two samples (~250g) should be taken at each site from the side and middle (where possible) of the stream. They should be obtained by scraping off the top 1-2 inches of sediment with a 16 oz. wide

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mouth screw cap (aluminum foil liner) bottle after decanting off the excess water (avoid large rocks and branches). The bottles should be securely closed, rinsed off and labeled with the following information:

1. Sample reference number.
2. Date taken (day and month).
3. Description of sampling site - distance from plant, any unusual conditions, etc.

Two water samples (~300 ml) should also be taken at each site. The samples should be obtained by direct immersion of a 16 oz. narrow neck screw cap (aluminum foil liner) bottle 5-6 times per sampling. The bottles should be securely closed and labeled in the manner as the sediment samples.

Please check the bottles for leaks before shipment.

It is also important that all sampling bottles be washed with hot, soapy water, rinsed with distilled water, acetone, AR hexane, and dried prior to use.

A cover memo addressed to me listing the samples should be included with the samples so that they can be logged upon arrival and checked against the memo.

It is helpful if a rough sketch of the area, with the sample sites marked on it, is included.

E. S. Tucker

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