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PROGRESS REPORT

# TECHNICAL SERVICES DEPARTMENT ANNISTON, ALABAMA PLANT

JOB NO. 002-1076

REPORT NO.

DATE July 21, 1970

TITLE:

AROCLOR LOSSES AT THE ANNISTON FLANT

OBJECTIVE:

To report ell data which is eveilable to dete on Aroclor losses in the Anniston Plant. Also, to report all data on Aroclor residues in the Snow Creek - Choccolocco Creek Watershed. To summerize progress to date on Aroclor cleen-up efforts et Anniston.

PERSONNEL:

E. G. Wright, (J. T. Bell)

REPORTED BY:

E. G. Wright

SUMMARY:

Aroclor losses from the Anniston Plent for the period April 15 through June 30, 1970, everaged ~ 16 lbs./day. This is a considerable improvement over losses of > 250 lbs./day for a comparable period during 1969. (Note: > 250 lbs./day is used for the 1969 figure because improved analytical methods and actual measurement of material from the catch tank and coalesce: have shown that the losses were approximately 10 times as high as was reported in 1969.) This reduction has been primarily achieved by an educational program and resulting changed operating habits plus HCl organics removal projects. Other projects are being installed and evaluated which will further reduce these losses toward the Business Group goal of 10 ppb.

#### FUTURE WORK:

- 1. Continue sampling end enalyzing for Aroclor losses on a routine basis.
- 2. Continue to cample end enalyze grab camples from Snow and Choccolocco Creeks for Aroclor content.
- 3. Semple end analyze ambient eir for Aroclor content.
- 4. Sample end analyze tank vents in the Aroclor department to pinpoint etmospheric loss points.
- 5. Collect additional equatic samples from Choccolocco Creek Watershed.
- 6. Issue periodical reports on Anniston Plant losses and progress toward 10 ppb goal.

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EXHIBIT 19

giving higher results. A closer correlation is expected when an accurate measure of the Aroclor phase can be accomplished. Close observation of the sump should provide this information.

### E. Miscellaneous Samples (Data Sheet VII & VIII)

These semples were collected from Snow and Choccolocco Creeks at various times. They show that Aroclors are present in the Choccolocco Creek, even above where the Honsento effluent enters the creek. They also indicate significant emounts of Aroclor in the mud end water of Choccolocco and Snow Creeks a condiserable distance (15-20 miles) downstream from the Anniston Plant. In fact, Aroclor concentrations can probably be found in the Coosa River system.

Data Sheet VIII lists the results of samples taken while the Aroclor department was not operating. These results indicate that significant Aroclor is being lost even when the plant is down or that these are deposits of Aroclor in the verious severs.

The sample from Coldwater Spring (City of Anniston's water supply) was taken for the purpose of establishing a background for this area. It might be interesting to note that this is the only sample collected to date which does not contain Aroclors.

### DATA SHEET I

Sample Location: HC1 Department Sever Average Flow: 200 GPM

Da Ce	Aroclor Concentration (PPB)	Aroclor Losses (#/dey)
4/15/70	12	0.030
4/16/70	7.8	0.019
4/17/70	8.3	0.020
4/20/70	18.5	0.044
4/21/70	6.2	0.015
4/22/70	16.4	0.039
4/23/70	10.6	0.025
4/24/70	20.4	0.050
4/27/70	15.0	0.036
4/28/70	13.1	0.031
4/29/70	18.7	0.045
5/3/70	10.5	0.025
5/4/70	11.3	0.027
Average:	13.0	0.031

### DATA SHEET II

Sample Location: Warehouse Sever Average Flow: 65 GPM (Estimated)

Dete	Aroclor Concentration (FFB)	Aroclor Losses (#/day)
4/22/70	2,800	2.18
4/23/70	2,860	2.23
4/24/70	1,250	0.98
4/27/70	1,520	1.18
4/28/70	1,300	1.02
4/29/70	2,130	1.66
5/3/70	1,320	1.03
5/4/70	1,480	1.15
Average:	1,833	1.43

### DATA SHEET III

Sample Location: Aroclor Still Room Sever

Average Flow: 150 GFM (Estimated)

Dete	Aroclor Concentration (PPB)	Aroclor Losses (#/day)
4/22/70	12,500*	
4/23/70 .	13.8	0.025
4/24/70	30.0	0.054
4/27/70	17.0	0.036
4/28/70	12.2	0.022
4/29/70	4.8	0.009
5/4/70	20.0	0.036
5/6/70	11.0	0.020
5/8/70	23.4	0.042
Average:	16.5	0.031

<sup>\*</sup>Contaminated sample - not included in everage.

# DATA SHEET IV

Sample Location: Aroclor Chlorinator Sewer

Average Flow: 275 GPM (Estimated)

Dete	Aroclor Concentration (PPB)	Aroclor Losses (#/day)
4/22/70	80.0	0.264
4/23/70	46.5	0.153
4/24/70	35.0	0.115
4/27/70	51.0	0.168
4/28/70	56.5	0.186
4/29/70	70.0	0.233
5/3/70	81.6	0.262
5/4/70	73.0	0.241
5/6/70	85.3	0.281
Average:	64.3	0.212

### DATA SHEET V

Sample Location: Total Plant Effluent

Average Flow: 900 GFM

Date	Aroclor Concentration (PPB)	Aroclor Losses (#/day)
4.418/70	20	
4/15/70	98	1.08
4/16/70	150	1.65
4/17/70	3,300	36.30
4/21/70	10,800	119.00
4/22/70	16,000	176.00
4/23/70	B75 J	9.62
4/27/70	13,750 18,000	151.00 198.00
5/4/70	3,300	36.30
5/5/70 5/6/70	9,750	107.00
5/6/70 5/7/70	9,900	109.00
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5/10/70	3,300	36.30 14.60
5/12/70	1,327	
5/20/70	2,659	29.20 <b>/</b> 0.75
5/25/70	68 316	· •
6/2/70	216	2.38
6/3/70	880	9.70
6/5/70	148	1.63
6/6/70	360	3.96
6/7/70	950	10.45
6/8/70	315	3.46
6/9/70	3,100	34.10
6/10/70	400	4.40
6/11/70	7 <del>5</del> 0	8.35
6/12/70	1,540	16.90
6/13/70	1,875	20.60
6/14/70	85	0.94
6/15/70	820	9.00
6/16/70	520	5.72
6/17/70	1,820	20.00
6/18/70	490	5.40
6/19/70	3,500	38.50
6/20/70	3,825	42.00
6/21/70	800	8.80
6/22/70	720	7.92
6/23/70	1.920	21.10
6/24/70	1,620	17.80
6/25/70	1,460	16.10
6/26/70	2,940	32 .40
6/27/70	680	7.47
6/28/70	3,966	43,60
6/29/70	3,200	35.20
6/30/70	4,200	46.20
Average:	1,460	15.74

<sup>\*</sup>Limestone Pit being cleaned out - Data not included in average.

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# DATA SHEET VI

Sample Location: Snow Creek Sampling Station

Date	Arocior Concentration (PPB)
4/15/70	1,800.0
4/16/70	233.0 124.0
4/17/70	499.0
4/18/70 4/19/70	5,435.0
4/20/70	1,950.0
4/21/70	1,220.0
4/22/70	2,550.0
4/23/70	3,200.0
4/24/70	3,750.0
4/25/70	3,800.0 2,166.0
4/26/70 4/27/70	1,860.0
4/28/70	860.0
4/29/70	2,800.0
5/1/70	2,800.0
5/2/70	1,450.0
5/7/70	1,320.0
5/8/70	1,760.0
5/9/70	1,840.0 9,600.0
5/10/70 5/11/70	1,740.0
5/12/70	3.8
5/13/70	1,566.0
5/14/70	1,325.0
5/18/70	1,920.0
5/19/70	2,400.0
5/20/70	1,320.0 3,000.0
5/21/70 5/22/70	1,500.0
5/23/70	800.0
5/24/70	1,540.0
5/29/70	12.5
5/30/70	5.0
5/31/70	14.8 25.0
6/1/70	16.4
6/2/70 6/3/70	36.0
6/4/70	14.0
6/5/70	1,320.0
6/6/70	140.0
6/7/70	240.0
6/8/70	104.0
6/9/70	430.0

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## DATA SHEET VI - continued

	Aroclor Concentration (PPB)
Date	(FFB)
6/12/70	630.0
6/13/70	760.0
6/14/70	254.0
6/15/70	1,470.0
6/16/70	41.5
6/17/70	110.0
6/19/70	216.0
6/20/70	272.0
6/21/70	480.0

Average:

768.0

<sup>\*</sup>Limestone pit being cleaned out - Dets not included in average.

### DATA SHEET VII

Sample			Aroclor Conc	entration
No.	Date	Sample Location	Mud	Water
1	10-8-69	Snow Creek at Glenaddia	2.36 x 10 <sup>7</sup>	23.3
2	10-8-69	Choccolocco Greek at Boiling Springs (upatresm from Honsanto's effluent)	78	8.1
3	10-8-69	Choccolocco Creek at City Treatment Plant (1 block below confluence of Snow and Choccolocco Creeks)	738,000	< 2.0
4	10-8-69	Choccolocco Creak at Jackson Shoala ( ~20 miles downstream)	7,300	5.8
5	10-8-69	Choccolocco Creek at Bureka Bridge (25 miles downstream, mouth of Choccolocco into Coosa River)	3,240	< 2.0
6	11-23-69	Snow Crack - 1 block below plant	2.19 x 10 <sup>6</sup>	20,300
7	11-23-69	Snow Creek at Glanaddia	1.84 x 10 <sup>6</sup>	1,435
8	11-23-69	Choccolocco Creek at Highway 9 (\$15 miles upstress from the confluence of Snow and Choccolocco Creeks)	1,536	11
9	11-23-69	Choccolocco Greek at Boiling Springs (upstreem from Monsanto's affluent)	26	10
10	11-23-69	Choccolecce Greek at City Treatment Plant (1 block below confluence of Snow and Choccolecco Greeke)	•-	58
11	11-23-69	Choccolecce Creek et Jackson Shoela (220 miles downstream)	470	10

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#### DATA SHEET VIII

Dage	Sample Location	Aroclor Concentration (??B)
10-3-69	Limestone Pit Influent	4,180
10-3-69	Limestone Pit Effluent	103
10-3-69	Plant Effluent	74
10-3-69	Watehouse Sever	216
10-3-69	Aroclor Chloringtor Sover	317
10-3-69	HCl Department Sewer	264
10-3-69	Plant Storm Sever	2
4-20-70	Coldwater Spring (City Water Supply)	MOA

"Mote: These samples were collected after the Arocler department had been shutdown one week due to a fire in the motor control center.

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