



06/16/98 13:11 SOUTHEAST JOURNAL → 314 694 3678

NO. 384 P001

THE WALL STREET JOURNAL
SOUTHEAST JOURNAL

FAX

Date June 16 - 98

To Kevin Cahill

From Baruch Hollander

This is the first of 16 page(s).
Please deliver to recipient as soon as possible.

One Peachtree Center, Suite 4200, Atlanta, GA 30308 tel: (404) 865-0170 fax: (404) 865-4379

HARTOLDMON0013916

THE WALL STREET JOURNAL. DOW JONES & COMPANY, INC.

Publishers

ONE PEACHTREE CENTER, 300 PEACHTREE STREET N.E.
SUITE 4200
ATLANTA, GEORGIA 30308

June 16, 1998

Mr. Kevin Cahill
Director of Public Relations
Solutia Inc.
10300 Olive Boulevard
St. Louis, Missouri 63166

VIA FAX
314/674-3678

Dear Mr. Cahill:

Thank you for allowing me to meet with you this week. Among the topics I would like to discuss are documents that discuss polychlorinated biphenyls, or, PCB's. I've enclosed the documents and marked certain segments that discuss the PCB's.

Among the questions I have:

1. What is the company's assessment today of PCB's?
2. Why has the company acquired the land surrounding the Anniston plant?
3. When did Monsanto learn of the potential health hazards of PCB's?
4. In a 1/23/69 internal memo, it is noted, "With the likelihood that the attention now being focused on the presence of Aroclors in natural waters will draw attention to any Aroclor being sewerred in our production plant outfalls, we should begin to protect ourselves." Could you please explain this memo?
5. In a 5/26/69 memo, it is noted, "We can anticipate that the Fedra will be looking at creek, river or lake water and mud samples below Anniston for PCB's." Did the company at this time have a concern about PCB's?
6. In a 10/26/70 memo, it is noted in reference to an AWIC official, "Crockett agreed that 'any written effluent level reports would be held confidential by the technical staff and would not be available to the public.'" Per this memo, was this at the request of Monsanto?
7. In a 3/30/70 memo, it is noted, "When are we going to tell our customers not to use any Aroclor in any paint formulation that contacts food, feed, or water for animals or humans? I think

it is very important that this be done." Why was it important that this be done?

8. In a 2/26/87 memo, it is noted, "It should be made clear, however, that no monies have been reserved for a major site cleanup program. The basic assumption...is that any current contamination can best be contained in one place. A requirement for removal and disposal of contaminated soil or to deal with significant changes in current regulations on idle sites would require major, undefined expenditures." In this case, why was the company trying to avoid these costs?

Thank you in advance for your help.

Sincerely,


Carrick Mollenkamp
404/865-4371

06/16/98 13:11 SOUTHEAST JOURNAL + 314 694 3678
Monsanto Chemical Company
At St. Louis, Mo.

NO. 384 P004
Mr. L.C. Weger-Nitro

Date June 12, 1956

To Dr. R. Emmet Kelly Reference
At Medical Dept. Subject: CHLORACNE CASES AT BADISCHE ANILIN
DUE TO TRICHLORPHENOL
Person Present: Dr. B. Gattel
Dr. H. T. Hofmann
A. Palm (Ph.D.)
W. Soenkzen (Plant Supt., part-time)

On the 17th of November, 1953, Badische was producing a batch of trichlorophenol from tetrachlorobenzene when the process exceeded control pressure and temperatures similar to our incident at Nitro. No one was injured at the time. Within one week, as clean-up was being carried out, the first cases of chloracne developed. Fifteen or sixteen cases (6 serious) developed within the next 1-2 months and additional cases showed up during the next 10-12 months until there was a total of 50-60 cases.

I did not see our most severe Nitro cases nor have I seen photographs of these cases. The photographs of the worst Badische cases show horrible skin eruptions with nearly blister-like welts and some ulceration where infection ensued. Areas involved included the face, neck, arms, and upper half of the body. It is my impression that their severe cases were much worse than ours. In addition to the skin manifestations, their men reported all the additional symptoms as experienced in our workers, i.e., fatigue, vertigo, loss of libido, painful joints, etc.

About ten days following the incident, and after initial clean-up, Dr. Gattel was asked to expose animals to the workroom atmosphere. Rabbits (in open wire cages) were placed in the operating area for 24-48 hours. There were no obvious symptoms which developed in the animals until one week after exposure - when they died. Autopsy showed liver necrosis. Gattel thought there might be virus infection or some other cause for death until he exposed additional animals in the department, others in cages suspended inside the "decontaminated" autoclave, and some in the adjacent department. All died within 1-2 weeks following exposure. Subsequently, animals placed in the cages which had previously been in the department died of liver necrosis.

A thorough systematic investigation has isolated impurities in the trichlorophenol process (or residues) which will cause the same effects in rabbits. Liver necrosis will develop in rabbits at the following doses of the indicated materials:

- 15-20 mg. of pentachlor naphthalene
- 1 mg. of chlorinated diphenyl oxide
- 0.2 mg. of residue from trichlorophenol distillation
- 0.01 mg. of residue fraction from trichlorophenol (above 230°C)

This document has been retyped for clarity.



#6

REPORT TO
MONSANTO COMPANY
TWO - YEAR CHRONIC ORAL TOXICITY
STUDY WITH AROCLOR 1260
IN ALBINO RATS
HISTOPATHOLOGICAL EVALUATION
OF ADDITIONAL LIVER SECTIONS

MARCH 24, 1975

IBT NO. 641 - 06672

I. Introduction

At the request of Dr. Levinskas of the Monsanto Company, additional sections of liver from a two - year chronic oral toxicity study of Aroclor 1260 in rats (IBT No. 622-07298) were processed into H & E stained sections and evaluated by light microscopy. The following report presents the results of this study.



DSW 034628

II. Summary

In most instances, the treatment-related histopathological findings in the liver from this re-evaluation did not differ significantly from that previously reported in our original report dated November 12, 1971. However, there were three benign liver tumors detected among three of the animals at the highest treatment level (100 ppm) of the 24-Month Sacrifice which were not previously reported. The other treatment-related lesions reported are regarded as degenerative or hyperplastic in nature and they are morphologic manifestations of an adaptive response of the liver associated with biotransformation of the test material. In general, the latter findings were confined primarily to test animals of the final sacrifice and they were dose-related in incidence and severity.

In conclusion, Aroclor 1260 appears to be slightly tumorigenic at levels of 100 ppm when fed continuously in the diet for two years.

Respectfully submitted,

INDUSTRIAL BIO-TEST LABORATORIES, INC.

Report Prepared and Reviewed by:


D. E. Gordon, D.V.M., Ph.D.
Section Head, Pathology

Report Approved by:


M. L. Keplinger, Ph.D.
Manager, Toxicology

QSW 036029

DATE September 18, 1970

REMARKS

REFERENCE

TO 7007 Bell - Anniston

J. R. Savage - JSAVA
W. E. Papageorge - WPAPA
D. B. Rosner - DROSM
G. L. Jesse - Anniston
G. Miller - Anniston
J. Landwehr - Anniston
J. L. Carter - Anniston

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CONFIDENTIAL

In reviewing your proposed letter to Joe Crockett with Legal, et al, we requested latest emissions data on the flow to Snow Creek. We had hoped that it might show an improvement over the last week in September and thus demonstrate a favorable trend to Crockett. Instead, the emissions are considerably increased with 9/13/70 at 6.25 ppm (or about 80 lbs. of PCB for the day). From the Legal standpoint, there is extreme reluctance to report even the relatively low emission figures because the information could be subpoenaed and used against us in legal actions. Obviously, having to report these gross losses multiplies, enormously, our problems because the figures would appear to indicate lack of control.

Realizing the extreme efforts the plant has gone to in order to curtail loss of PCB's, is there anything more that can be done to get the losses down? Is there a possibility that sampling practices are responsible for the wide variations shown (you might try duplicate effluent samplers)? Are there any practices in the manufacturing area which might result in the peak losses? Obviously, we cannot solve the problems from St. Louis but we do want to emphasize the concern from here.

Paul

Paul H. Hodges

/mg

DSW 014095



February 25, 1969

AROCIOR - WILDLIFE

R. E. Keller - So. Second

J. T. Garrett - GO

P. E. Hodges - CO

22

TO W. R. Richard/E. F. Wheeler
General Offices

On 9-6-68 four samples, two sediment and two water, from Snow Creek were received for Aroclor analysis. The water and sediment were sampled on 8-27-68 at the plant out fall and approximately one block below the plant out fall. The results of the analysis are as follows:

Sample Designation	Amount Aroclor Found	
	Sediment	Water
Plant Out fall	0.20±0.02%	58±2 ppb**
Plant Out fall (1 blk)	1.64±0.04%	-

* Sample broken in transit.

** No less than this amount present.

The amount of Aroclor found was calculated as Aroclor 1242. The EC/GC traces of the sediment were unmistakably Aroclor 1242. The water extracts appeared to contain only the lighter chlorinated species along with a number of other electron capture active materials. For this reason a "no less than" value is stated, more quantitative results will have to await the development of more specific separation techniques.

Bill, on the basis of this information, I think that if the PCB accusation turns out to be true and the government people become more active, we should plan on an extensive evaluation of the extent of contamination in this area. For example, samples should be taken further down Snow Creek, down Choccolocco Creek and even from the Coosa River if necessary.

You might check, but I think the lab there has the necessary equipment and could carry out this study.



E. Scott Tucker



NEV 031193

November 25, 1997

ANNOUNCEMENT - WILDLIFE

W. A. Funn - WILDLIFE

NO. 384 P009
H. Johnson
H. Johnson
H. Johnson
H. Johnson
D. Olson
H. Johnson
H. Johnson
H. Johnson
H. Johnson

#18

Bill, you wanted to become more familiar with the legal-political problems facing Aracolor with regard to pollution and the assumptions in the literature that chlorinated biphenyls are poisoning and killing wildlife.

These wildlife people have to be taken seriously. They have taken the DDT industry to court in Wisconsin to prevent the use and sale of DDT in Wisconsin and if they win in that state, DDT will be banned in many others. This case was on National Television last week. The wildlife people are dedicated to the ban on DDT.

Our problem is that Aracolor has been "identified" along with DDT residues and known to be almost certain of being down into the court records and may also be one of the suspects of the DDT defense. The wildlife people have accused Aracolor of doing all the bad things of DDT.

We are taking 3 steps to protect ourselves. Scott Parker and R. Follen are to repeat some of the analytical identification work feeding Aracolor to children and seeing if Aracolor is really present as "shown" by the laboratory. I hope we have been falsely accused but maybe Aracolor is present.

Dr. Wheeler is having feeding tests done on animals to establish a "safe" level for Aracolor feeding. If we can find a "safe" level, California's law will do 2 year experiments on animals including effects on succeeding generations. This will help a bit but the wildlife people must be stopped by this kind of evidence.

PLAINTIFF'S EXHIBIT
2A2

1 CC16

30

PLAINT. EXHIBIT
416

St. Louis - General Offices

Mark Nichols - Cleveland

September 3, 1965

ARCELOR 1242 -- Alliance Electric & Engineering Company, ClevelandRichard Davis
RDVI

As I told you on the telephone Mr. Harwood called me earlier this week quite disturbed as a result of my letter of August 27. This letter apparently alerted him somewhat to the potential toxic hazards of the use of Arcelor 1242 at elevated temperatures. He told me that the Monsanto literature furnished him had been more reassuring in terms of what problems might arise in their application. I guess what really shook him was when I mentioned that with temperatures greater than 150° mechanical exhaust ventilation should be provided to remove vapors.

For the record Mr. Harwood's application involves the use of Arcelor 1242 as a coolant in electric motors. Two motors are mounted on mining equipment used at the face of a drift. Total volume of Arcelor for the two motors is approximately two gallons. Harwood estimates that four quarts per day of this quantity would be lost in the mine -- presumably all of it by volatilization. I told him I doubted that the ventilation provided in mines would be sufficient to keep this amount of Arcelor at the threshold limit value of 1.0 mg/cu. meter of air. He told me there had been some complaints in mines where the motors were being used. He wasn't specific but I understood that the complaints were of odor and irritation. Whether or not the levels are actually irritating I don't know. It may be that the miners have just recognized that there is something in the air now that wasn't there before. Mr. Harwood went on to say that in his own plant hot Arcelor spills on the floor were common and that his own employees had complained of discomfort. I was brutally frank and told him that this had to stop before he killed somebody with liver or kidney damage -- not because of a single exposure necessarily but only to emphasize that 8-hour daily exposures of this type would be completely unsafe.

Harwood called a second time to inquire about the decomposition products with specific reference to decomposition products resulting from electric arcing. I told him that we had Underwriters' Laboratories reports on heat transfer fluids which were pertinent. He recognized that the chief decomposition

MONS 097873



Richard Davis

Page 2

9/1/65

product would likely be HCl. I emphasized that this in itself is a good "warning agent" which serves to limit voluntary exposure to high concentrations of decomposition materials.

I told Mr. Harwood further that the Medical Department was skeptical about the use of Arcelors in mining operations because we had not seen data to show absence of toxic levels.

I emphasized and re-emphasized that the Arcelors are excellent products but must be used in closed systems if they are to be heated. He implied in his second conversation that his engineering group was looking at redesign to provide a "sealed" system.

Klaus P. Wheeler

KPW:mjb

P.S. Mr. Harwood pointed out that in his application the Arcelor could be heated up to nearer 400° than the 150° figure which I had mentioned.

KPW

MONS 097874

Mr. Paul Hoffman



Mr. Hoffman	✓
Mr. [illegible]	✓
Mr. [illegible]	✓
Mr. [illegible]	✓

I talked with the Hercules representative who attended the Dow meeting on the 2,4,5-T problem. He was Dr. Jack Frawley, a toxicologist.

It appears the presentation was the same as the one you and I were given. Representatives of Diamond and Hooker were there. Dr. Frawley stated that Dow told the various companies in private what the content of dioxane was in their 2,4,5-T acid. I gathered that Diamond and Hooker had some but Hercules stated they were told they had none.

It appeared to Frawley that Dow was having this meeting because they did not think they could, in conscience, not tell industry about their findings. Hercules also seems to believe that the Public Health Service would be very happy to get into the act, whether or not the chlorine exists in the ultimate user. I must agree with them about this and it would seem almost mandatory that we see if we can first firm up our analytical methods and then devise ways to minimize the presence of this known chlorine agent.

There is also another very good reason for us to do this. Regardless of what we think of the rabbit test, this dioxane compound must be a potent contaminant. Very conceivably, it can be a potent carcinogen. So, therefore, will never know how close we are to having another epidemic at Micro, and we certainly don't want to go through that again.

I am going to be out of the country until about April 20, but Dr. Johnson and Mr. Wheeler are quite familiar with the various aspects of this problem and are available for discussions.

A. Mont Kelly, R. D.

RET/ld

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6/24/65

55

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#73

MEETING AT SOUTHWEST REGIONAL OFFICE OF EPA
1421 Peachtree St. N.E.
Atlanta, Georgia
November 11, 1971

Those Present:

Monsanto

J. T. Garrett
D. B. Hosmer
G. L. Jesse
J. P. Landwehr

State of Alabama

Joseph Crockett

Southwest Regional EPA

John White, Director of Enforcement
Dave Hill
Dennis Cafaro
George Harlow

Subject: PCB Effluents from Anniston Plant
to Snow Creek, Choccolocco Creek, Etc.

This meeting was arranged by Mr. Joe Crockett at the request of Mr. John White.

Mr. White had two primary areas for concern:

1. The Federal Department of Justice has apparently recommended that suit be initiated against the Anniston plant for PCB emission under the Federal Refuse Act.
2. He will be required to approve or recommend a Refuse Act disposal permit for Anniston which limits pollution levels.

The PCB production history of the Anniston plant was reviewed briefly from its beginning in 1929 to the present. Our program to control and reduce PCB emissions to Snow Creek was reviewed by both Monsanto employees and Joe Crockett who emphasized that we had kept him fully advised concerning our program and our progress. Gene Jesse carefully pointed out

DSW 014380

Meeting at Southwest Regional
Office of EPA
November 11, 1971
Page 2

that our production of PCB's had been greatly reduced in January, 1971 and discontinued in August, 1971. It was explained that current PCB emissions in the liquid effluents primarily resulted from our inability to make a complete separation of biphenyl from other polyphenyls. Mr. Jesse stated that equipment would be installed to vastly improve this separation by July 1, 1972, and that by this time a further reduction in PCB in effluents would be effected.

There was considerable discussion concerning the limiting level of PCB that should be permitted in the discharge. Mr. White suggested "no detectable amount." Mr. Crockett and the Monsanto personnel pointed out that this was an undesirable approach. The preferred concept was explained as a reduction in aqueous volume accompanied by a concentration reduction (reduced pounds per day). This appeared to be accepted.

As a result of the meeting, the following agreements were reached:

1. Mr. Crockett and Mr. White will agree upon an interim permissible level for PCB emissions to be provided in the Resource Act permit. Obviously, Mr. Crockett will press for a number in excess of our 0.3 lbs./day current level.
2. The permissible PCB will be reviewed again when our new separation equipment is in operation as of July 1, 1972 to arrive at a new permit level.
3. A summary report outlining our past work and future plans will be written and sent to the EPA office via Mr. Crockett's office.
4. A second copy of our existing monthly reports on PCB effluents to Mr. Crockett will be forwarded to Mr. White via Mr. Crockett.
5. Monsanto is ready and willing to meet with the Federal EPA personnel concerning the PCB problems whenever requested and will feel it a privilege to describe our program.

OSW 014381

Meeting at Southwest Regional
Office of EPA
November 11, 1971
Page 3

6. EPA can come and sample our effluents in a mutual program at any time they want to do this. (I believe they will use our data.)

We explained to Mr. John White that Mr. G. L. Jesse, the Anniston Plant Manager, was the man who spoke for Monsanto at Anniston. We further explained that Mr. Jack Garratt's presence was to indicate the support of the Company's Medical Department and that Mr. D. B. Rosner's presence was to demonstrate support of the Monsanto Industrial Chemicals Company, who is responsible for the manufacture of PCB's.

It was suggested by Mr. White that it might be desirable to dredge Snow Creek. I believe we convinced him that this is undesirable.

We received strong indications that the Southeastern Regional EPA Office will recommend strongly against a Rarose Act suit by the Federal Department of Justice on PCB pollution.

The entire atmosphere of the meeting was favorable, including the lunch following it.

D. B. Rosner

bt
11-12-71

OSM 014382

Monsanto

#106

FROM: M. A. Pierle → St. Louis, G4WT - 4-8882

DATE	February 26, 1987	cc. H. J. Corbett	DID
		R. L. Fields	CZNI
SUBJECT	ANNISTON	T. L. Gossage	G4NH
		T. R. Lafferre	G4NJ
REFERENCE		V. T. Mattaucci	G5NR
		D. Mickelson	C2NA
TO	R. C. Potter	D. B. Radington	G2S8
	G4NH	F. E. Raining	G4NO
		M. W. Winkel	G5NG

You requested that we estimate the potential site environmental costs at the Anniston plant. MAC has provided current estimates of these costs and we have reviewed them.

Various restructuring, RCRA closure and ERAP reserves for the Anniston site were established at \$5.8M exclusive of PNP and polyphenyls (\$1M). Anticipated expenditures against these reserves will result in a \$1.9M balance. This includes reasonable estimates for closure of various RCRA facilities and equipment, decontamination of parathion and P₂S₅ departments, clean up of the ditch to Snow Creek, and additional site investigations.

Ongoing monitoring and remedial actions associated with the old parathion plant and the landfill are estimated at \$300-400k per year. MAC has budgeted funds for 1987 to cover these costs, and is committed to cover the same costs in future years.

It should be made clear, however, that no monies have been reserved for a major site cleanup program. The basic assumption, based on present knowledge of the site and regulations, is that any current contamination can best be contained in place. A requirement for removal and disposal of contaminated soil or to deal with significant changes in current regulations on idle sites, would require major, undefined expenditures. Should such a major need develop, the corporation would need to address proper allocation of costs.

In summary, planned environmental improvements can be accommodated within the current reserve with an expected balance of \$1.9M environmental and \$1.0M PNP and polyphenyls. The ongoing costs associated with planned closure (\$300-400/yr.) will be borne by MAC. The expanded site study will be started in 1987 with results expected in about 12 months. While the \$1.9M would cover reasonable further cleanup efforts, any significant issues would have to be dealt with based upon the facts at that time. As we have indicated before, discontinued MCC operations were a significant part of the Anniston history.

We are ready to discuss the details at your convenience.



M. A. Pierle
M. A. Pierle

DSM 120027

IN.1120

344.122/PAM.1

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