WATER_PCB-SPO00000070

Douglas R. Hansen - Santa Clara

October 10, 1973

Intalco Aluminum
Ferndale, WA

Bill Papageorge - St. Louis
~~Cumming Paton - St. Louis~~
Tom Gossage - St. Louis
rf

Erik Treffner
MONSANTO COMPANY
1004 Hamilton Avenue
Vancouver 3, BC
CANADA

A Mr. John Michaelson from Intalco called Gary Graf today (10/8/73) requesting some information of Therminol FR-1. Gary referred his call to me. Apparently over the weekend, Intalco had a seal leak on their T-FR-1 system and an unknown quantity of fluid was spilled into their scrubbing pond. Mr. Michaelson wanted to know if we had any tests which he could run to determine how much FR-1 had spilled into their pond. I gave him the information in the Sales Information Bulletin, Number 82, which explains how to determine the PCB content in a Therminol system which has been converted to 55 or 66. I also explained, however, that this might not be applicable in his case, since the Therminol spilled into this pond probably settled directly to the bottom. Consequently, it would be rather difficult to get a uniform sample of material from the pond to determine the percentage in the pond.

I suggested he might want to run a hose or a tube down to the lower part in the pond and see if he could take a sample from that area. Then he could analyse this to see if it was pure Therminol. Even by doing this, he would not be able to tell how much Therminol he had lost, however. I warned him about the possible problems of PCB contamination and checked with him to see if there was a chance it could get into the environment. He said there is no chance of that, since this pond is isolated. He did mention, however, if they so chose, they could drain the pond into the ocean. I told him that he should be certain not to do that, since a leak of that type could get him in serious trouble with State and Federal authorities. I also told him I would have Mr. Bill Papageorge call him to discuss this problem in greater detail.

Erik, as you remember, we discussed the reasons why this customer should convert to T-55 or T-66 with them in detail back in June. At that time they made the decision to stay with FR-1, since they did not have the money available to convert and the FR-1 system was working very well. This spill might now force them to make a change, if it, in fact, was a major spill. If that is the case, they probably do not have enough fluid to keep running, and it is doubtful they can find any make-up for the FR-1.

By copy of this memo, I am asking Mr. Papageorge to keep us informed if there is anything we can do further from the field.

Doug

0601386

WATER_PCB-SPO00000071

Intalco Aluminum
Ferndale, WA

p.s. - Mr. Michaelson's phone number is 206-384-1061.

DRH

0601387

WATER_PCB-SPO00000072

W. B. Papageorge - General Offices, B1ND

October 11, 1973

T. L. Gossage - B28L
~~C. Paton~~ - B28C
E. Treffner - 5120

INTALCO ALUMINUM
FERNDALE, WASHINGTON

Mr. D. R. Hansen
Santa Clara

Conversation file

On October 9, 1973 I called Mr. John Michaelson, Intalco Aluminum, to review his Therminol FR-1 spill.

He was still attempting to determine the magnitude of his loss and wanted advice on methods of disposal of Therminol FR-1 liquid, absorbent material saturated with Therminol FR-1, and mixtures of sludge, water and FR-1. I informed him that scrap Therminol FR-1 should be disposed of by incineration at high temperatures followed by scrubbing of the stack gases. He believed he had facilities that could accomplish this and was going to investigate further. I informed him that Monsanto had no facilities for disposing of solid wastes contaminated with Therminol FR-1 or liquids containing more than 1% water. I suggested that the solid wastes be buried in an authorized sanitary landfill.

Mr. Michaelson was also interested in analytical methodologies for determining PCB content in liquids. As soon as he was informed that GLC was involved, he decided to go to Battelle Institute for laboratory services.

He seemed pleased with Monsanto's assistance and indicated he might call back if he needed further help. He also indicated that, unless the loss of fluid was great, he had enough make-up on hand to satisfy his current needs and would postpone any decision concerning conversion to a non-PCB fluid.

W. B. Papageorge

/bt

0601388

WATER_PCB-SPO00000073

Monsanto — **CALL REPORT – ORGANIC DIVISION**

DICTATE IN SEQUENCE:
1. HEADING INFORMATION
2. NAMES OF ADDRESSEES
3. NAMES OF CARBONEES
4. IMMEDIATE ACTION NEEDED
5. REPORT ON CALL

REPORT CAPTIONS:
1. OBJECTIVE
2. PERSONS CONTACTED
3. RESULTS
4. ACTION REQUIRED

CUSTOMER NAME						DATE OF CALL
Intalco Aluminum Corporation, P.O. Box 937						7/26/73
CITY AND STATE			DATE RECEIVED			DATE TYPED
Ferndale, WA			8/1/73			8/10/73
CUSTOMER MAILING LIST CHANGES – SERVICE CENTER USE ONLY						
NAME AND TITLE			PUT ON	TAKE OFF	MP	MAG.	CATEGORY CODES
For Conversion File							
REGION	SERVICE CENTER	SALESMAN					
Western	Santa Clara	Erik Treffner:sl					

TO Cumming Paton - St. Louis CC Don Roush - St. Louis

CONTACTS: Norman Catanzedaro - Matl Mgr
Robert W. Rehpohl - PA

OBJECTIVES: 1.Therminol FR conversion.
2.Pydraul potential.

RESULTS:

THERMINOL - Discussed T-FR1 conversion in detail, however, they had been able to get material from our small competitor in the South, Coastal Chemical. With the present power shortage and the staff cutback, it does not appear that prospects for conversion at this plant are very good at this time.

PYDRAUL - They are presently using Standard's EP-11 hydraulic fluid. They do not seem to be too keen on converting. Selling for Pydrauls will have to be done at plant level. I will follow this up on my next calls.

WATER_PCB-SPO00000074

D. R. HANSEN, SANTA CLARA

December 20, 1972

Cumming Paton, St. Louis

INTALCO
FERNDALE, WASHINGTON

→ GFF/DER
→ FK cont file

JOHN KRISS
BRITISH COLUMBIA

John, I am curious what the latest progress is on this account converting from Therminol FR to Therminol 55 or 66. If my memory serves me correctly you have made a couple of calls on this account recently to discuss conversion procedures. Unfortunately, however, I do not remember seeing any call reports covering this subject.

This is a rather large account (3,000 gallons) so it is important that we do get this business. Please let me know just what the current status is at this location.

Doug
D. R. Hansen

DRH:sl

0601390

WATER_PCB-SPO00000075

D. R. HANSEN, SANTA CLARA

December 20, 1972 Cumming Paton, St. Louis

THERMINOL CONVERSIONS

CLIFF BOUTIN
SANTA CLARA

Cliff, according to the latest status report there are only three accounts in your territory which have systems containing over 1,000 gallons of fluid which have not yet converted from the Therminol FR product. These three accounts are:

Chancellor Western Oil Bellows, California	(2,000 gallons)
Cotter Corporation Cannon City, Colorado	(1,000 gallons)
Eureka Chemical San Francisco, California	(1,000 gallons)

I know you are fairly current on Chancellor, Western and Eureka. However, I have never heard anything about Cotter Corporation, and since it is in your territory it should be followed up. According to Paul Gann's status report they are targeting to convert in January of 1973. I would appreciate your following up to make sure we get this business.

I would also like for you to keep a bring-up file on both Chancellor Western and Eureka to make sure that they convert to the Therminol products when they decide to make a conversion.

I made a mistake in my original paragraph because there is a fourth company which has an 1,100 gallon system in your territory. This is Standard Oil of California in Gaviota. Please check with this customer to find out what they plan to do. Here again we have no information on this location, but since it is an 1,100 gallon potential we would certainly like to get the business.

I would appreciate your comments on Standard Oil's location and Cotter Chemical's location sometime in late January.

Thanks very much --

Doug

Doug Hansen

DRH:sl

0601391

WATER_PCB-SPO00000076

Neary

(206) 384-1061

STATUS

1. Customer INTALCO ALUMINUM (HOWMET) — Major FR User / MICC Bus. Grp. / Other MC
2. Address (FR Location) Ferndale, Wash.
3. Other Locations Using FR: Yes [X] East Arco No [ ]
4. Prior Experience: T-55 [ ] T-66 [ ] Other [ ]
5. Other Locations Converted from FR: Yes [ ] No [X]
6. Any Conversion Attempts by Monsanto: Yes [ ] No [X]
7. Any Conversion Inducements: Yes [ ] No [X]
8. If Yes to 6 or 7, give details and status _____
9. Applications for FR (Details) Carbon paste processing
10. FR System(s) FR1 — Volume (gal.) 2 x 1200 gal. — Max. Op. Temp (°F) 550°F
11. Any System Peculiarities or Precautions _____
12. Likely Replacement: T-55 [ ] T-66 [X] Other [ ]
13. Sales History

	1968	1969	1970	1971	Date of last order	Volume of last order
Total Volume Orders/Year				28,000		

14. Key Personnel (address/title/phone)
Jim Fredericks, Carbon Plt Supt. (206) 384-1061
~~Bravo~~ Gegenahuber, Maint. Supt. ←
Stan, Cheetham, Chief Eng

0601392

WATER_PCB-SPO00000077

CONVERSION ACTION

1. Conversion Target Date

2. Monsanto Help Needed _____

3. Progress of Conversion

Date	Action	Initiated by
1-3-72	Discussed conversion requirements. Recommended T66, sent literature on 55/66.	Neary
1-18-72	Conversion Bulletin sent.	KL
2-18-72	They are preparing conversion plans, discussing with fire ins. underwriters, may not convert until forced. May get fluid from coastal.	Neary
11-6-72	Sam called Mike Adams on conv. plans, he said progressing OK.	Sam

0601393

WATER_PCB-SPO00000078

U.S. POSTAL SERVICE
OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300

Postmark of Delivering Office

SENDER INSTRUCTIONS

- Print in the space below your name, address, including ZIP Code.
- If special services are desired, check block(s) on other side.
- Moisten gummed ends and attach to back of article.

RETURN TO

MONSANTO COMPANY
P. O. BOX 14617
ST. LOUIS, MO. 63178

PS Form 3811 Rev. 1970

0601394

WATER_PCB-SPO00000079

Intalco Alum., Ferndale, Wash.

SENDER: Be sure to follow instructions on other side

PLEASE FURNISH SERVICE(S) INDICATED BY CHECKED BLOCK(S)
(Additional charges required for these services)

☐ Show to whom, date and address where delivered

☐ Deliver ONLY to addressee

RECEIPT

Received the registered article described below

REGISTERED NO.

CERTIFIED NO. 137414

INSURED NO.

SIGNATURE OF ADDRESSEE (Must always be filled in)

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY
Intalco Alum. Corp.

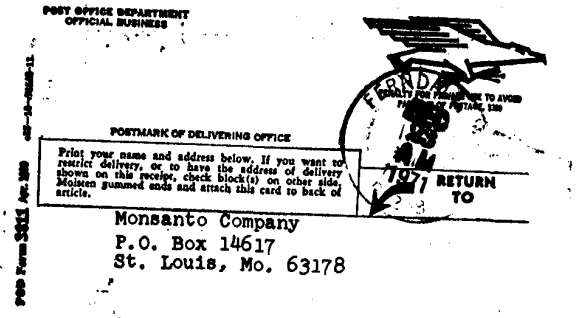
DATE DELIVERED
12-22-71

SHOW WHERE DELIVERED (

12-15-71 mailing

0601395

WATER_PCB-SPO00000080



0601396

WATER_PCB-SPO00000081

Santaloo Alma. Ferndale, Wash.

PLEASE FURNISH SERVICE(S) INDICATED BY CHECKED BLOCK(S). REQUIRED FEE(S) PAID.

☐ Show to whom, date and address where delivered ☐ Deliver ONLY to addressee

RECEIPT

Received the numbered article described below.

REGISTERED NO.

CERTIFIED NO. 64925

INSURED NO.

SIGNATURE OR NAME OF ADDRESSEE (Must always be filled in) Jack Lawker

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

DATE DELIVERED 12-23-71

SHOW WHERE

12-15-71 mailing

055-16-71840-11 847-198 GPO

0601397

WATER_PCB-SPO00000082

10-3-72

Bob Hollingsworth,
Intalco
Box 937

Ferndale, Wash 98248

The Safety, & environmental contact at Intalco.

Just recently found our past correspondence on PCB — Surprised that no action was taken — he will push for immediate change —

Please send
Legislation package
T-55 T-66
Conversion bulletin
Present FR return status and conditions

0601398

(He feels that he may have some influence on Eart Alco. Don told Hollingsworth that Eart Alco was still getting Safe Heat from Coastal; and the source may dry up soon.)

Neary

CUSTOMER INQUIRY

DATE: 1-5-72 TIME: 1230

COMPANY: Intalco ADDRESS: BOX 957
NAME : Jim Frederick Ferndale, Wash. 98248
POSITION: Carbon Dept. Supt. PHONE NO. (206) 384-1061

NEW FLUID ORDER INFORMATION

FLUID TYPE:
CONTAINER :
QUANTITY :
PRICE :
SHIPPING POINT:
DATE REQUIRED:
P.O. NO. :

SHIP TO:
ATTENTION:
BILL TO:
ATTENTION:

SYSTEM DESCRIPTION

FLUID APPLICATION: Carbon Baking plant
LOCATION: MIN. AMB. TEMP. °F
FLUID: PRESENT ERI REPLACEMENT
SYSTEM VOLUME: 1200 GAL. 2 systems
BULK TEMP: MAX °F AVG 530°F
SKIN TEMP: MAX °F AVG °F
OPERATING TIME: HRS/YR.
HEATER TYPE: Gas FLUID VEL. FT/SEC
PUMP TYPE: PUMPING RATE: GPM
HEAD TK: GAL DRAIN TK: GAL OTHER:
SYSTEM LOCATION: INDOOR OUTDOOR
SAFETY ACC.: SPRINKLERS INERT GAS
COLD SEAL FURNACE
OTHER
PIPING: WELDED FLANGED & TYPE
BOLTING GASKETS
INSULATION TYPE & THICK.
WEATHER BARRIER TYPE
TRACER TEMPERATURE °F
CLEAN OUT: 55 FLUSH CHEMICAL
SOLVENT OTHER
FLUID DISPOSAL: CONTAINER QUANTITY
SHIPPING PLAN
SHIPPING DATE
INFORMATION REQ'D: FLUID FLUID FLUID FLUID
PHYSICAL PROPERTY DATA COMPARITIVE DATA: & ; &
PRICE & SHIPPING INFO.
CONVERSION: GENERAL EXP. TK. FURNACE PIPING
INSULATION EQUIPMENT CLEAN OUT TOXICITY
DISPOSAL ANALYSES
APPLICATIONS UNLIMITED ENGR HEAT TRANSFER DATA BOOK
QUESTION FOR GROUP:

MONSANTO VISIT REQ'D: YES NO CHECK LATER DATE TIME
REMARKS:

SYSTEM FLOW DIAGRAM
American Hydro Therm
Equip.

0601399

WATER_PCB-SPO00000084

10-27-72
Mike called meeting to know what we had done. Told him I would call back 10-30-72 after I touch base with Bough on consultant supportion.

10-27-72 - called Cliff Benton (Hansen Ord); reviewed situation & requested name of a consulting firm in San Fr area. Do will call me 10-30-72

0601400

Intalco

Eigenhauer -
— they want to change
without the scales

~~Has~~
they will b

John Kreis
Hann gave him name
of co's in area a Reynolds
Marsana on Comm. imp
& experience.

0601401

10-20-72

Mike Adams
Intalco Alumn
Ferndale Washn

Jerry Vo[illegible]
Hawmet
AMX

Having head ache because have no one who knows about heat & fluid or equipment

Have looked over the system;
Have tabled with the various Reynolds - 3 locations
Bate Comeau
Messena
Reynolds Longview in Washington on steam (always)

He will visit them.

There 5 plants in the states who have not switched
1. Intalco
2. East alco

To contact them on system conversion.

0601402

WATER_PCB-SPO00000087

Same type of application as Reynolds -

2 Problems -

1.

Gann

1. Complete removal of P.R. thoroughness drain.

Bottom part is a large (75% of wgt) storage tank operating at 575 °F. Into which can drain system - Can get a clean system drain - 2 yrs ago, drained system, and did a good job.

1. On one side 1-2 year old, good condition.

2 - other side 4 years

In addition to the storage tank have an expansion. Have a cold seal tank; also following cold seal, have a vapor separator. (Off the expansion tank have 2 air breakers.) Air movement goes through the cold seal etc. before the air breaths.

2 - Getting system clean.

Don't believe this will be a problem, relative new plant and cleaned out once -

Gann pushed invert gas.

0601403

WATER_PCB-SPO00000088

Has contacted mfg, mixer & prefeater will contact mfg of dailer.

Don't go into the storage tank except for drain, all equipment is connect for drain to storage tank, exit is the filling pump.

Storage tank for emergency use only

Reason for 75% capacity, is if you drain at this temperature.

Normally not in system.

Warned to be sure the storage tank contains no O_2 when dumping hot fluid.

May want a flame arrestor on storage tank.

0601404

~~Expa~~ Expansion ~~tanks~~
past 1½ mo no fluid in
expansion tanks -

Pump seals -

Farm recommended 2-3
day flush at 400-500°F.

They plans to ~~convert~~ convert
on side at a time -

Their ~~situation~~:
Have flexible hoses, have
3 break / year; bitume metal
flexible hoses -
spring a minor leak -

Have drain on system, have
60 open drain for air; bleed
off the air.

(Math & Mission major)

0601405

/

Dawn — see Rauch on consultants or firms who Intellex could use to handle their conversion.
→ Let Mike Adams know

At the moment, quite away

Incineration:
Have been building a pit incineration.
1700°F will be scrubbed on fold works.
Will burn all garbage, tires, carbon materials, water waste ~~test~~ discharge, ~~[illegible]~~
Just got money to built.
Gave U.B.P. name; to discuss advisability of their using their incineration for PCB disposal.

10/30/92 John Kriss, 604-688-9891 (Monsanto sales) will call Bruno to ~~[illegible]~~ the situation and then let Dawn or Mike Adams know the result.

0601406

WATER_PCB-SPO00000091

bcc 1800 J. A. Kriss
B2SC C. Paton/D. Roush
1800 D. R. Hansen

October 5, 1972

Mr. Robert Hollingsworth
Intalco Aluminum
P.O. Box 937
Ferndale, Washington 98248

Dear Mr. Hollingsworth:

This will confirm your October 3, 1972 phone conversation with our Mr. Don Roush. We appreciated the opportunity to review with your company once again the desirability of discontinuing the use of Therminol FR fluids and to relay Monsanto's continued emphasis for the return to us of PCB containing fluids for proper disposal by high temperature incineration.

As you know from previous correspondence, Monsanto has responded to the increasing concern about PCBs* by confining sales to certain limited end use applications.

In May, 1972 the Federal Government's Task Force on PCBs recommended against the use of PCBs as heat transfer fluids. Enclosed is a copy of a summary article on their proposals for your review. Also enclosed is a copy of a Wall Street Journal article which highlights restrictive action proposed by the FDA.

In April, 1971, our Mr. Papageorge sent a letter addressed to "Plant Manager" of your plant. You may want to review this letter for additional background on this PCB subject (a copy of which is enclosed).

You may be aware that some Federal and State agencies are sampling plant effluents and marine life looking for, among other things, PCB chemistry. If PCB is found, the agencies tend to determine the PCB source.

In light of the above, we believe you should seriously consider prompt conversion of ~~their~~ these Therminol FR system.

*Polychlorobiphenyls

0601407

WATER_PCB-SPO00000092

I have enclosed literature on two possible replacement fluids, Monsanto's Therminol 55 and 66. Therminol 66 has the higher maximum operating temperature (650° vs. 575°F.). It is, of course, your decision what product or system you choose as a replacement for Therminol FR. Enclosed is a price bulletin for T-55 and T-66 products.

We want to point out that unlike the Therminol FR products, Therminol 55 and 66 are not classified as fire-resistant heat transfer fluids. Consequently, you should consider the use of protective devices to minimize any added fire risks. We suggest you consult with the insurer of your property and the manufacturer of your equipment relative to this matter.

In order to protect Therminol 55 or 66 from oxidation, we suggest the use of an inert gas blanket on your expansion tank system to preclude air contact with hot fluid. If you use a recirculating line to the expansion tank, this should be valved closed during the normal system operation.

A snuffing device should be installed on the combustion chamber if you have a gas fired heater. Steam, carbon dioxide or nitrogen may be used to extinguish a furnace fire caused by a heater tube rupture. The snuffing device may be activated by a high temperature switch in your furnace stack.

Please refer to the enclosed Therminol Conversion Bulletin for additional information.

When converting your system to Therminol 55 or 66, we suggest you thoroughly drain the Therminol FR. Flush the piping, equipment and expansion tank with T-55 or a non-chlorinated solvent and again drain into leak-free drums. If T-55 is selected as the flush fluid, it may be advantageous to operate the system several days before draining to loosen and remove system soil.

You may experience some fine material collecting around pump seals, resulting in some fluid leakage. Such material is probably iron salts from the FR-1 system. It may be necessary to spot flush the pump and other "hold up" equipment in order to effectively remove such material and to maximize removal of the FR fluid.

Enclosed is a bulletin on pump seal problems.

0601408

WATER_PCB-SPO00000093

Monitoring Converted System

To monitor your Therminol 55 or Therminol 66 fill, we suggest checking the viscosity, acid number and appearance of the fluid for particles on at least a monthly basis. An increase in acidity to 0.3 - 0.5 and the formation of particles in the fluid mixture are signs of decomposition of the Therminol by acid forming from residual FR-1 fluid. Should the particle content build to approximately 1%, I would suggest either filtering of the Therminol mixture or a change of fluid. A doubling of fluid viscosity is also an indication of fluid decomposition.

Return of Used Fluids for Incineration

We will, until further notice, continue to make available our high temperature incineration service for proper disposal of any Therminol FR fluid or fluids contaminated with PCBs which your company may have on hand, on the following basis:

1. We will charge 3¢/pound to incinerate fluids sent freight prepaid to our Sauget, Illinois plant for:

   a) Therminol FR series fluids

   b) Therminol 55 or 66 fluids which may contain PCBs formerly in your system.

2. We will charge 5¢/pound to incinerate non-aqueous, non-Monsanto fluids contaminated with PCB if sent freight prepaid to our Sauget, Illinois plant.

When you have fluids for return, please contact me at (314) 694-2500 as to the fluid type, number of drums and any special invoicing procedure you may require. I will send you the necessary pre-addressed drum return labels which we request be used.

We cannot handle aqueous solutions or solids (i.e. sawdust, rags or sludge). For these materials, we suggest you check local authorities and your own environmental department for an approved land fill or disposal method. Our Sauget plant is instructed to refuse receipt of containers containing solids, and to return same to the sender at the sender's expense.

0601409

WATER_PCB-SPO00000094

If your system drain and flush approximates 4000 gallons, you may want to return the fluids in one of our 4000 gallon rail tank cars that we have dedicated for this service. If you go this route, we will need a minimum of three weeks lead time to finalize arrangements.

Thank you for your cooperation and please feel free to contact me at (314) 694-2500 if there are further questions.

Sincerely,

Paul W. Gann
Project Coordinator
Heat Transfer Fluids

PWG:cs

Enclosures
- April Papageorge Letter
- Govt. Task Force Letter
- FDA Article
- T-55 bulletin
- T-66 bulletin
- Conversion bulletin
- Price bulletin
- Mechanical Seal bulletin

0601410

WATER_PCB-SPO00000095

D.R. HANSEN, SANTA CLARA

September 26, 1972

Paul Gann

INTALCO ALUMINUM
Ferndale, Washington

JOHN KRISS

John,

Attached is a recent memo from Paul Gann which shows that Intalco plant at Ferndale still has not converted from their Therminol FR system. They have a nice volume of 2,400 gallons to be converted, and consequently they should be considered a key target for you.

Please contact Paul Gann to coordinate on how this account will be handled. Since you do cover this territory, I think you should take primary responsibility for working with the account directly to see that they convert to either Therminol 55 or 66.

Let me know by October 5th just what you and Paul Gann have decided to do to get this account converted.

Doug
D.R. Hansen

/sb

REC'D SEP 28 1972

0601411

WATER_PCB-SPO00000096

bcc: DR Hansen - 1800
JA Kriss - 1800
CP/DHR/JJR
~~DHR~~/File

June 12, 1972

Mr. James Fredericks
Intalco Aluminum
P. O. Box 937
Ferndale, Washington, 98248

Dear Mr. Fredericks:

Enclosed are two articles dealing with PCB's which you may find of interest:

1. Proposed FDA rule making on PCB's in food and food-related industries. Department of Health, Education and Welfare, proposed legislation taken from the Federal Register, vol. 37, no. 54, dated Saturday, March 18, 1972.

2. A Wall Street Journal article which highlights the restrictive action proposed by the FDA.

More recently, a Federal Government task force which has been reviewing the PCB situation, issued a report suggesting the banning of PCB's from all non-electrical uses. Their report specifically suggests banning PCB's from use in heat transfer systems.

We are also aware that some Federal and State agencies are sampling streams, rivers and other large bodies of water looking for, among other things, PCB chemistry. If PCB is found, the agencies tend to determine the source of the pollution.

In light of the above, you may wish to update your plans for conversion of your Therminol FR[1] (PCB) system.

Sincerely,

P. W. Gann
Project Coordinator
Heat Transfer Fluids

sj

Enclosures
FDA Rule Making
Wall Street Journal Article

0601412

WATER_PCB-SPO00000097

Monsanto

FROM (NAME & LOCATION) D. E. Roush - St. Louis

DATE : May 2, 1972

cc: CP/JJR
Jim Savage
W. Papageorge

SUBJECT : Recent Therminol FR Reclamation Jobs
Findett Service Co., St. Charles, Mo.

REFERENCE :

TO : Paul Gann

Paul, listed below are several Therminol FR reclamation jobs that Findett have completed for various customers.

This data may be helpful in determining those FR accounts that have a supply of FR fluid which may possibly forstall their conversion.

CUSTOMER	LBS. RECOVERED	SHIP DATE OF RECOVERED FLUID
W. R. Grace, Dewey & Almy Div. Owensborough, Kentucky	11,800	10/29/71
Bendix, Kansas City	19,800	10/26/71
P. D. George, St. Louis	6,800	11/ 2/71
American Cyanamid, Mobile, Alabama	9,500	11/ 9/71
Intalco, Ferndale, Washington	9,950	11/22/71
Crawford Mfg., Richmond, Virginia	5,700	11/29/71
Bendix, Kansas City	10,900	12/20/71
Union Camp, Dover, Ohio	8,150	12/29/71
Lever Bros., Baltimore, Maryland	7,350	1/25/72
Cargill, Carpentersville, Illinois	18,600	1/26/72
Chemetron, Huntington, West Virginia	12,000	2/15/72
PPG, Circleville, Ohio	10,000	3/14/72
FMC, Front Royal, Virginia	20,800*	1/ 7/72

0601413

REC'D MAY 2 1972

WATER_PCB-SPO00000098

* The FMC reclamation is on Therminol FR-0. Most of this material remains at Findett for disposition. It has been released for disposal by FMC and should be returned to WGK plant for free incineration. Please make the necessary arrangements for the return of this fluid from Findett Service Company to WGK plant.

I understand all of the remaining FR recovered is Therminol FR-1 with the exception of P. D. George and American Cyanamid where it is reported Therminol FR-2 was recovered.

PPG has shipped the recovered fluid to their Torrance, California plant and a small quantity to their Springdale, Pa. Research Center. All of the above accounts have been contacted relative to conversion and, as I recall, their reasons for not converting or disposition of FR fluid will appear in the conversion team contact file.

D. E. Roush

DER/ao

WATER_PCB-SPO00000099

bcc
CP/DER/JJR
~~P. W. Germ~~/File

January 18, 1972

Mr. T. Fredericks, Carbon Plant Supt.
Intalco
Box 937
Ferndale, Washington 98248

Enclosed is the conversion bulletin which provides guide lines for converting your Therminol FR heat transfer system. As we previously stated, the replacement fluid may not be classified as fire resistant; therefore, an evaluation of your system relative to fire hazards should be made.

We recommend that you plan your conversion as soon as possible. The Therminol FR fluids are no longer available and are not compatible with other heat transfer fluids.

Thank you for your continued cooperation on this matter. Please contact me if you have any additional questions on the conversion.

Sincerely,

Heat Transfer Specialist

cs
Enclosure

0601415

WATER_PCB-SPO00000100

bcc: 1800 - D. R. Hansen
CP/DER/JJR
~~P. W. Gunn~~/File

January 3, 1972

Mr. J. Fredericks
Carbon Plant Superintendent
Intalco Aluminum
P. O. Box 937
Ferndale, Washington 98248

Dear Mr. Fredericks:

As discussed in our phone conversation today, we recommend Therminol 66 as a replacement for the Therminol^{R} FR-1 you are now using based on its significantly higher temperature stability over Therminol 55.

I have enclosed literature on both Therminol 55 and 66. Details concerning various engineering aspects of the conversion will follow under separate cover.

We would like to remind you that Therminol 55 and 66 are not classified as fire resistant heat transfer fluids. Consequently, you may wish to consider the use of protective devices to minimize any added fire risks. We suggest that you consult with the insurer of your property relative to this matter.

We will pay freight costs incurred in returning the Therminol FR to us and will properly dispose of the material by high temperature incineration. We will also accept return of any unopened drums of Therminol FR series products which may be in your possession and credit you for this material at full purchase price if returned prior to March 1, 1972.

0601416

WATER_PCB-SPO00000101

I will be glad to answer any additional questions you may have and thank you for your cooperation in this conversion.

Sincerely,

R. L. Neary
Heat Transfer Specialist

Enclosures:
Therminol Applications Unlimited
Therminol 55 Heat Transfer Fluid
Therminol 66 Heat Transfer Fluid
Therminol Fluids Description

RLN:kl

0601417

WATER_PCB-SPO00000102

bcc C. Paton/D. Roush/J. Roder
1800 D. R. Hansen
5120 J. A. Kriss
→ ~~Paul Gann~~

December 20, 1971

Mr. Norman D. Catanzaro
Material Manager
Intalco Aluminum Corp.
P.O. Box 937
Ferndale, Washington 98248

Dear Mr. Catanzaro:

Confirming our telephone conversation of December 17 we wish to personally confirm Monsanto's decision to discontinue the sale of Therminol FR heat transfer fluids effective December 15, 1971. The official letter of discontinuation is enclosed for your review.

Should you wish to take advantage of the special services available to you to convert your Therminol FR system, please contact as directed in the accompanying letter.

Very truly yours,

J. J. Roder
Product Supervisor
Heat Transfer Fluids

cs
Attachment

cc Donald Keliher
Ann Repco

69/12-30

0601418

WATER_PCB-SPO00000103

J.A. KRISS, VANCOUVER

May 31, 1972

~~D.E. Roush~~
D.R. Hansen

INTALCO
Ferndale

J.J. RODER
ST. LOUIS

Jim,

As recently reported in my call report, Intalco, Ferndale, does not plan to convert from Therminol FR to Therminol 55 or Therminol 66 for at least one year. Their reasons are that they must have fire resistance and they cannot afford the time for conversion. Also, they have sufficient FR fluid to last them for one year.

J.A. Kriss

/sb

0601419

WATER_PCB-SPO00000104

Bob,

1. Roder requests a letter including the FOA activity statement - and they may want to revise their conv. plans. (or up date)

2. Before sending letter, suggest you contact J. Fredericks for his status (rather than rely only on their call report.)

No change from my call (2/18) and subsequent call (4/5) to Eastalco. RLN 5/16

Paul
5-10-72

0601420

Monsanto CALL REPORT—ORGANIC DIVISION

DICTATE IN SEQUENCE:
1. HEADING INFORMATION
2. NAMES OF ADDRESSEES
3. NAMES OF CARBONEES
4. IMMEDIATE ACTION NEEDED
5. REPORT ON CALL

REPORT CAPTIONS:
1. OBJECTIVE
2. PERSONS CONTACTED
3. RESULTS
4. ACTION REQUIRED

CUSTOMER NAME						DATE OF CALL
INTALCO						5-1-72
CITY AND STATE				DATE RECEIVED		DATE TYPED
FERNDALE, WASH.				5-8-72		5-8-72
CUSTOMER MAILING LIST CHANGES—SERVICE CENTER USE ONLY						
NAME AND TITLE		PUT ON	TAKE OFF	MP	MAG	CATEGORY CODES
REGION	SERVICE CENTER	SALESMAN				
WESTERN	SEATTLE	J,A, KRISS				

TO CUMMING PATON
ST. LOUIS

CC ~~S.J. Roder~~
J.H. Davidson

PERSONNEL CONTACTED: Pete Aylen, Asst. Supt. Carbon Anode Plant
Jan Mcdonald, Casting House Supt.
Dave Leslie, Mobile Equipment Maint.

POTENTIAL: Therminol 66 - 15,000 lbs.; Pydraul 50E unknown

RESULTS OF CALL

Aylen has enough FR-1 on hand to last him two years and does neither want nor plan to change to Therminol 66 or other fluid until he has to. The FR fluid is used in a paste anode plant. Intalco definitely has FR hydraulic fluid application potential but is not using same because it is felt they have not really had need. They are aware of hazards but resist a change due to seal compatibility. The induction furnace area has standard hydraulic fluid. They used to use Pydraul, Pyrogard 210 and recently an FR fluid from Standard Oil in a furnace tilt. Mobile equipment is on standard hydraulics. Bruno Gegenhuber appears to be the key contact and was not available the last two calls.

ACTION REQUESTED

JAK - Send literature on C Series to Jan Mcdonald and Dave Leslie.

/sb

Paul Hann
Would you please have our std FDA type letter sent to speed them up.
JAK

REC'D MAY 10 1972

REC'D MAY 1972

0601421

5-331 (REV. 12/68) 1 - CENTRAL OFFICE COPY

WATER_PCB-SPO00000106

1800SC D. E. Roush

December 27, 1973

Intalco Aluminum Co.
Ferndale, Washington

5120
E. TREFFNER

W. F. Pague
D. R. Hansen - 1800

The sample of sludge-like material from Intalco's Therminol FR-1 system shows the sludge to be a mixture of iron oxides, and Therminol FR-1.

The deposits also contain a small amount of carbonaceous material.

Please report these results to your contact at Intalco.

These results refer to TSR 100/73.

D. E. Roush

cs

0601422

WATER_PCB-SPO00000107

D. E. Roush - St. Louis - B2SC

January 24, 1974

W. F. Pague
D. R. Hansen - 1800

Intalco
Ferndale, Wash.

E. Treffner
5120

Walter Jensen called again today concerning their Therminol FR conversion.

They are planning to pull the underground Therminol storage tank, have it thoroughly cleaned, painted, and reinstalled. I advised Walter to extend the emergency drop line to the storage tank to a level approximately 10 inches off the bottom of the tank. The reason for doing this is to minimize air contact with hot fluid and to eliminate the possibility of a static spark developing should it be required to quickly drain hot fluid to the storage tank. Walter further advises that they will connect two cylinders of nitrogen to this tank so that it can be inerted in the event they find it necessary to dump hot fluid to the tank.

Walter indicated that they are shooting for a March 4 conversion of the system and expect to have all the modifications completed by the end of February. No further action required.

D. E. Roush

/bi

0601423

WATER_PCB-SPO00000108

Monsanto

CALL REPORT

MONSANTO INDUSTRIAL CHEMICALS CO'

DICTATE IN SEQUENCE:
1. HEADING INFORMATION
2. NAMES OF ADDRESSEES
3. NAMES OF CARBONEES
4. IMMEDIATE ACTION NEEDED
5. REPORT ON CALL

REPORT CAPTIONS:
1. OBJECTIVE
2. PERSONS CONTACTED
3. RESULTS
4. ACTION REQUIRED

CUSTOMER NAME		DATE OF CALL
Intalco Aluminum Company		11/9/73 and 11/26/73
CITY AND STATE	DATE RECEIVED	DATE TYPED
Ferndale, WA	12/3/73	12/4/73

CUSTOMER MAILING LIST CHANGES – SERVICE CENTER USE ONLY

NAME AND TITLE	PUT ON	TAKE OFF	MP	MAG.	CATEGORY CODES
RLK xc GFF					

REGION	SERVICE CENTER	SALESMAN
Western 12/6	Santa Clara	Erik Treffner:sl

TO Cumming Paton - St. Louis

CC W.R. Richard - St. Louis
Don Roush - St. Louis
J.S. Pullman - New York

/11/9/73/

CONTACTS: Walter Jensen - Mech. Eng.

OBJECTIVE: Review Therminol FR conversion.

This customer is converting to T-66. Discussed the changeover in detail and inspected the installation and obtained blueprints for the whole system. They are getting quotes from both Dow and Halliburton for cleanout of the system. I met the Dow Sales REpresentative during this call, and we inspected the system together with Jensen.

The Dow man had no recommendations to make as to how to dispose of the FR fluid or the resulting waste solvents and acid flushing fluids. He was going to check with Midland, Michigan, and get some more details for disposal from that location. Apparently, Halliburton has been very good as far as getting backup information on the clean up, etc. Jensen was going to take out some samples of the sludge in the system and insisted I pick up a sample and send it to St. Louis for analysis. I pointed out the sludge could possibly contain iron sales, rust and other debris, however, he was still keen on us alalyzing the material.

/11/26/73/

CONTACTS: Walt Jensen - Mech. Eng.

OBJECTIVE: Follow-up on Therminol FR conversion.

Intalco has decided to contract the clean-out with Halliburton. Halliburton has suggested the following procedure: drain fluid, flush with Xylene (4,000 gallons), water flush (10,000 gallons), boil out (7,000 gallons), water flush (14,000 gallons) and air dry. They have found the company which will remove the old FR fluid as well as all the flush out solvent and water which contains PCBs. This company is called the Resource Recovery Corp., P.O.Box 2431, Olympia, WA 98507. Contact there is Newt Clark at 767-0350. Apparently, this company has big holding ponds at Richland, WA, where the nuclear wastes are being stored. Their plan is to dump the materials into this pond and let it evaporate naturally I suspect they may also want to reclaim the old FR fluid. I will contact them on my next trip to Seattle and check on that.

Jensen is wondering whether he could mix T-66 with the old FR fluid temporarily until the changeover, as they are running extremely low on makeup fluid. They understand, of course, that this mixture would have to be dumped as well. Jensen also gave me a sample of the sludge which had accumulated in their expansion tank and wanted us to analyze the material for him. I will mail this under separate cover to Don Roush.

Continued ...

Maybe should check with WBP if this is OK.

SALESMAN'S CALL REPORT – ORGANIC CHEMICALS DIVISION – PAGE 2

CUSTOMER NAME	Intalco Aluminum Company	DATE OF CALL 11/9/73 & 11/26/7

ACTION REQUIRED
ATTENTION DON ROUSH - Please comment on T-66/FR mixture and also expedite an analysis from the deposits.

ATTENTION J.S. PULLMAN -
Jensen had talked to Reynolds in New York regarding their T-FR conversion. He had heard that they had not cleaned out their system and had just filled with T-66 and were apparently having a great deal of difficulty with sludges and deposits blocking the filters and causing havoc with their seals. Jensen's contact there is Bill Adams (315) 764-0211. I would imagine we are aware of their problems; if not, we should probably follow-up on this.

0601425

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S-950-3

WATER_PCB-SPO00000110