Monsanto

FROM (NAME & LOCATION) James J. Rode. - B2S J

DATE October 18, 1971

SUBJECT TRIP REPORTS

REFERENCE

TO : C. Paton
B2S H

cc H.R. Ford - 1070
J.G. Frederiksen - 1460
T.L. Gossage - B2S L
N.T. Johnson - B2S J
D.E. Roush - B2S H
D.W. Stegen - 1460

Shell Oil Company
New Orleans, Louisiana

Date of Call: October 11, 1971

Personnel Contacted: Ken Arnold - Enginsering
Dan Murphy - Engineering
D.W. Magnus - Safety

Shell is quite concerned over the unavailability of Therminol FR for their new platforms in design. The loss of FR may cause them to take a whole new look at the method of heating on the new platforms but for now they must use a fluid as Murphy's project is ready to be awarded. Companies bidding on the project include PSI, Crest Engr. and Hutchinson Hayes.

Therminol will be heated in an exhaust heat recovery unit with gases supplied at about 900-950°F. from a gas turbine. They are fearful of using Therminol 66 because they have gas temperatures over the AIT of Therminol 66 and even commented that Dowtherm G with its + 1100 °F. AIT might be the answer.

We did review the possible methods of fire protection with them and their safety engineer Magnus. He appeared to be a very conservative person but I believe we do have Arnold and Murphy convinced that Therminol 66 can be used safely provided precautions are taken at the exhaust heat recovery unit.

1. Exhaust stack temperature switch which could detect fire in the tube section and release a snuffing material.

2. Differential pressure switch across the tube section which would signal a tube failure and activate a two way control valve to bypass flow away from a ruptured tube.

A decision on the fluid must be made within the next two to three weeks. The only information they need from us at this point is any data we have on the explosiveness of Therminol 66 such as that prepared for the hospital applications.

IM-10 REV 11-65

PLAINTIFF'S EXHIBIT 212 10-25-95

TNGS 006211

WATER_PCB-SD0000076415

Discussion was also held on the Coastal Chemical situation and the indication was that Shell had their own boat to deliver fluid offshore and if we would deliver to a dock that would be sufficient.

Humble Oil Company
New Orleans, Louisiana

Date of Call: October 11, 1971

Personnel Contacted: Gary Zirkle

Zirkle has completed preliminary plans for a new platform for Eugene Island Block 295. He had heard the PCB problem and the discontinuation of FR and wanted to know the full story about the need to change the design of the system and change to Therminol 66.

This platform will involve a gas fired heater and suggestions were made on fire protection. We reviewed the canned pump possibilities but they had already provided enclosures for the centrifugal pump and explosion proof motors so did not feel it necessary.

Every system appears to be equipped with an inert gas blanket so it is not necessary to revise the expansion tank area in going to Therminol 66.

This project is about ready to go out for preliminary bids but final drawings and installation date were not available at this time. I do not believe we should have any problem recommending Therminol 66 at Humble particularly with Gary Zirkle as he apparently had been told to use Therminol 66 by the Humble personnel after talking to Don Stegen.

Pedco (Petroleum Distributing Company)
New Orleans, Louisiana

Date of Call: October 11, 1971

Personnel Contacted: Harold Treleaven Jr.

WATER_PCB-SD0000076416

A visit here was prompted by our attempts to locate a company who could offer a method to supply fluid in either drums or skid tanks to offshore platforms. After talking to Treleaven it appears that we may have been hoodwinked by Coastal into believing they really offered a service. According to him, Coastal did not supply a boat but merely delivered the drums or skid tanks to a dock where the customer picked up the fluid in their own boat for delivery.

Coastal did loan or rent the skid tanks, however, and possibly advised or loaned a man to supervise filling.

Pedco has some potential for us in that they have the largest network of warehousing and dock facilities in the Gulf Coast area. They could provide the same day service that customers now have to wait two days for in getting a shipment from Houston. They could also provide skid tanks if the potential warrants.

No further action is required on our part but Treleaven will provide an estimate of storage and handling costs for Therminol products based on a minimum 30 drums and a maximum 60 drums should we need this type of service.

Pedco is presently our distributor for Pydraul AC.

Chevron Oil
Lafayette, Louisiana

Date of Call: October 12, 1971

Present for Chevron: Leo Gray, District Engineer
Joe LaBlanc, District Prod. Mgr.

Gray confirmed that they had definitely purchased and received a charge of Safeheat 600 chlorinated biphenyl for their new offshore platform. They did purchase the fluid from Coastal Chemical and told us that a Houston chemical company had made the product. He did not have a sample of the fluid. We offered our services in the testing of any samples made available by Coastal.

The major reason they were so concerned about this platform is that the living quarters are on the same platform as the Eclipse heater and this could not be changed. Future platforms will not be designed this way and our interpretation was that they would never again use a PCB material. This does not rule out other methods of heating such as steam, direct fire or Dow G.

Gray estimated about four new platforms for them in the next year.

WATER_PCB-SD0000076417

Atlantic Richfield
Lafayette, Louisiana

Date of Call: October 12, 1971

Personnel Contacted: Larry Nermyr

This location is only involved with the production portion of their offshore platforms. All design and startup of platforms is handled through their Dallas location and followup there is important to have Therminol 66 specified instead of Therminol FR-1. They are actually involved with oil processing plants instead of gas but fluid will be needed to heat heater treators to separate water from oil before piping to shore.

The key contact here appears to be a Mr. Harold Champlayne who was not available. He appears to be the man who heads up the entire production group.

Cities Service Oil Company
Lafayette, Louisiana

Date of Call: October 12, 1971

Personnel Contacted: Gene Harmon

They have a new offshore platform designed and being built for Eugene Island Block 258 which will be their first production plant. Therminol FR-1 had been specified but again these production people were not the key contacts. Suggested followup at Houston with:

Wayne Settles
Frank Jones
Frank Preebe
Bob Tribble

Previous contact had already been made by Stegen with Settles and Tribble indicating that a fluid charge was needed very quickly for a new system. Will followup again at Houston.

Skelly Oil Company
Lafayette, Louisiana

Date of Call: October 12, 1971

Personnel Contacted: Maurice Perkins
Tony Davis

WATER_PCB-SD0000076418

We discussed with them their recent purchase of Therminol 66 for their new offshore platform. They definitely feel that we made the correct decision in switching them away from PCB material. They even asked us what we thought of Coastal's attempt to sell PCB inspite of the environmental situation. They had been approached by Coastal and flatly refused to buy the material.

No new systems for them in the near future, but they may be back to us shortly regarding startup of the new Therminol 66 system.

Tenneco
Lafayette, Louisiana

Date of Call: October 12, 1971

Personnel Contacted: Buster A, Kelley
Dist. Engr.

Kelley was very evasive regarding our attempts to explain the PCB situation and only offered token interest in our attempt to switch his proposed system to Therminol 66. Continued probing, however, indicated that they had already received a charge of chlorinated biphenyl for their new system. He was not sure where they had purchased the fluid--he commented that "a shipment of makeup fluid had been hijacked on the open seas" for the new system. He was not particularly cooperative in finding out who actually purchased the material but our suspicion is that this was supplied by Coastal either through a buildup in previous Monsanto stock or from their new supplier. We do not recall any recent shipments of FR to any of their four or five existing platforms.

The purchasing director at this location is a Mr. Arnold Kellim (318-232-3600) but he was on vacation for the week. He should be contacted to determine his participation in ordering of new fluid.

Kelley estimated about 4 - 6 new systems for the next year and our impression was that as long as PCB material was available he did not want to look at any alternate fluids.

My suggestion at Tenneco is to locate a VP at home headquarters who could be impressed with the PCB problem sufficiently to shut them down internally.

Another possible contact at this location is a Mr. Percival Campbell who works for Mr. Kelley.

WATER_PCB-SD0000076419

Hudson Engineering
Houston, Texas

Date of Call: October 13, 1971

Personnel Contacted: Sid Victory
Bob Heigold

Victory is the project engineer for two offshore platforms being engineered for Humble Oil. Stegen previously had met with Victory and some Humble Oil personnel from New Orleans (Joe Greene and Sid Copeland) to discuss the possible use of Therminol 66. Since that time they have decided that they will not use Therminol 66. Either they will fill the system with PCB from Coastal or they will use Humbletherm 500. We may still have a chance for these fills however since Mr. Greene from Humble is the same person who advised Gary Zirkle to use Therminol 66 for his platform.

Victory did not exhibit any interest in our problem and indicated that if an FR fluid could not be used they would automatically seek out a petroleum oil product as a replacement. The selling job here will have to be done on Humble.

Bob Heigold has been assigned a heat transfer system project for Lubrizol. This will be a duplicate of an existing system at Lubrizol, Houston, where they already use FR. We have already offered to replace the existing charge of FR with Therminol 66 at a discounted price. We also agreed to dispose of the product at no charge.

Their purchasing director, Carl Eklund at Lubrizol, Painesville, Ohio, has been advised of our no new systems policy and our offer to convert the existing system to Therminol 66 and our recommendation of Therminol 66 for the new system. We do not know at this time of their interest in converting but in view of the present situation with Coastal the fill for this system must be watched closely. Each system involves about 5000 gallons. This proposed plan for conversion may have suffered slightly because they had a fire in their Mobiltherm system in the last two weeks. We are not supposed to know this but will undoubtedly have a bearing on their decision.

PSI
Houston, Texas

Date of Call: October 13, 1971

Personnel Contacted: Floyd Pollock

PSI has the engineering contract for a portion of the Phillips platform for the North Sea. Phillips has been informed about our no new systems approach and they were disappointed enough to say they would not use Therminol 66. Pollock did not have any information regarding fluid selection and the Phillips man, Dan Hornback, was not in the office during our visit. I would suspect that Coastal has contacted Phillips at Bartlesville regarding their PCB product so would suggest that John Frederiksen recontact there to try to obtain specification

WATER_PCB-SD0000076420

with Therminol--Stegen should recontact Hornback at this location.

John Albaugh and Mr. Gilgore are involved with the engineering of the platform for Citco but fluid selection is to be made by W. Settles and Bob Tribble at Citco.

Citco
Houston, Texas

Date of Call: October 14, 1971

Personnel Contacted Wayne Settles

Citco is only 3 - 4 weeks away from filling a new platform at Eugene Island Block 258. Settles admitted that they would definitely buy the PCB product from Coastal.

He is also sending out for bids another new platform and he will definitely ask for a PCB material. They expect that fill will be required about March 1972.

He said that in view of the fact that we were continuing to supply the material for the electrical industry there was no reason they could not use it.

We asked if he would like us to talk to their environmental engineer for these platforms and he suggested that he would perform that function.

Again no real interest in the PCB problem.

Texaco
Houston, Texas

Personnel Contacted: Bill Power

Texaco has one platform designed around FR-1 with the expected fill required in January 1972. They have already been approached by Coastal and right now they are undecided about the PCB problem. I believe we have a chance at this location to convince them about the possible long range effects but if we can not they will buy from Coastal.

WATER_PCB-SD0000076421

Any data we can supply regarding the future of PCB's will help and I believe contact at a higher level or with their environmental group would be helpful. There is the possibility, however, that they would use a petroleum fluid as an alternate to our Therminol 66 but at least we would have an opportunity to sell our products.

Power also said that the future of liquid phase heating systems would not be ended with the exit of the PCB materials. The advantages of liquid phase systems still out weigh the loss of fire resistance and they could design fire protection into the system.

James J. Roder

lb

WATER_PCB-SD0000076422