

SUMMARY OF NPS/AMOCO MEETING 12/02/93

PRESENT: AMOCO- Mike Grimm and Mike Greenwood
NPS- John Miller and Paul Eubank

LOCATION: Padre Island National Seashore Ranger Station

SYNOPSIS:

The meeting began with a summary of the NPS perception of the problems associated with the proposal by Amoco to clean up the contamination of the soil and groundwater at the South Sprint #1 production facility. Mr. Miller stated that the situation involving Amoco and the NPS has been elevated beyond the ability of the park to give approval for procedures associate with Amoco's plan to remediate the contamination. Additionally, Mr. Miller stated that the level of cleanup (10,000 PPM) acceptable to the Texas Railroad Commission (TRC) was not going to be acceptable to the NPS. Mr. Grimm stated that in this particular situation, water contamination, that the level Mr. Miller quoted did not apply. Rule 91 of the TRC applies to contaminated soils only. The lack of adequate background water quality data was discussed. Mr. Miller mentioned that the park was currently trying to acquire some of this data through a contracted study.

Mr. Grimm stated that the sampling Amoco conducted revealed that the contamination was not from recent practices. The hydrocarbons analyzed revealed weathering. Amoco has tested all lines in the facility to determine if there were any leaks. No leaks were discovered. Samples were taken from under the storage tanks on site to determine if there was any leaking from the bottoms. No leaks were discovered. The tanks have false bottoms so leaks can be discovered.

Mr. Grimm expressed Amoco's concern in the following manner. In a hypothetical situation, Amoco could cleanup 90% of the contamination in the first year and the remaining cleanup would require ten years. Is this level of cleanup necessary, if studies support no impact from the 10% of contamination remaining.

It was reasonable to understand the hypothetical situation, but any decision as to the cleanup level would have to be carefully reviewed by NPS experts.

Mr. Grimm and Mr. Greenwood proceeded to explain the removal of the free phase hydrocarbon from previously identified hot spots. Both men had dug additional holes to sample for other possible locations to put recovery wells. They identified two more possible locations that had free phase hydrocarbon. The water table in the Amoco location has dropped an estimated 2-3 feet between the time of the hydro punching testing previously and to date. One of the

recovery wells has not produced any free phase hydrocarbon yet. Two of the wells have recovered 7 gallons of hydrocarbon in 24 hours. The pumps on the recovery wells are timed to pump for one minute every three hours.

Mr. Grimm explained the process of air sparging that has been successful in a similar situation in a Amoco facility in Michigan. What Amoco would like to proceed with next is to install an air sparging system in the location of the old pit the begin the cleanup of the dissolved hydrocarbon in the water and soil.

This process would involve the installation of 10 sparges, 15 feet into the ground , 20 feet apart (see enclosed diagrams). When air is pumped into the sparges it returns to the surface at a 45 degree angle. The return air from the sparges meet 5 feet from the surface. This is the depth of the contamination. The process uses air to enhance naturally occurring bacteria production to eat the hydrocarbon being moved toward the surface. Amoco test for hydrocarbon vapors reaching the surface indicate that the hydrocarbon is consumed before reaching the surface.

Mr. Grimm stated he has considered another method that might be used instead of air sparging called vaporization. This involves the removal of the hydrocarbon vapors through the recovery wells and the vapors are filtered to removed the hydrocarbons.

Groundwater monitoring wells would have to be installed to monitor the results whatever method of cleanup is approved.

The question of meeting with the Regional Minerals Coordinator and other NPS officials for explaining the processes discussed was expressed. A copy of the Minerals Coordinator's business card was furnished to Mr. Grimm and Mr. Greenwood to telephone and arrange such a meeting.

A diagram of an air sparging system and a copy of an air sparging system was furnished for NPS files.

Paul H. Eulauke
12/3/93

