

Kozloff, Keith

From: Johnston, Leslie(PPC) [LJohnston@usaid.gov]

Sent: Friday, April 16, 2004 11:36 AM

To: Keith.Kozloff@do.treas.gov

Subject: fax number etc...

Jackee's fax number is: 216-3235

Mine for a copy of it is: 216-3227

Thanks!

I have also attached Cambodia piece -- may or may not be helpful.

Forgot to tell you that they are relocating MRC to Vientiane -- not sure if it has happened yet.

Also thanks for the ADB/UNEP notice -- I am planning to attend.

Time line from Tim -- USAID/Peru:

"We have checked with a variety of sources about the problem last week in the Paracas Bay. There seems to be unanimity that the problem was caused by the start up of the fishmeal plants. There may have been some other contributing factors but this is not certain. The following is some of the chronology of what occurred according to the draft report of a sub-contractor under one of our USAID contracts.

On April 1, the Ministry of Production (PRODUCE) authorizes exploratory fishing of two anchoveta species. On the same day the plants near San Andres clean their tanks in preparation for the fish and empty the wastewater from this process into Paracas Bay. All the waters of the Bay change to a light blue color. Scallops are starting to show signs of asphyxia (shells are opening).

On April 2, commercial fishing of anchoveta begins with 10.5 metric tons of fish off-loaded. Later the same day local villagers observe the first dead fish on the beach. Large quantities of dead crabs are also reported on the Athens Beach. The Bay remains a light blue color.

On April 4, 11,400 metric tons of anchoveta are offloaded. Officials of the Ministry of Production, IMARPE and local fishermen observe extensive patches of the sea, in front of the plants and out 3 to 4 kms, covered with dense (fish) oil. There is a heavy presence of dead fish in front of the plants but not yet to the south. A large number of local people converge on the beach to collect the dead fish, both commercial and non-commercial species. Mortality of crabs is massive in the Cangrejal zone within the Paracas National Reserve. The density of dead fish is approximately 20 to 30 fish per square meter.

April 5, the fishing activity continues and also the sea life mortality in the Bay. PRODUCE says that due to a substantial number of juvenile fish in the exploratory exercise, commercial fishing of anchoveta should stop between April 7 and 11.

April 6, The last fish catches offload and the mortality in the Bay continues.

April 7, Massive fish mortality on most of the beaches of Paracas Bay. Hundreds of people arrive on the Beaches to collect the dead fish. The estimated density is 50 fish per square meter and species are more varied. The only survivors at this

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point are scallops (with 5% mortality) and jelly fish. Colloidal material (oils and proteins) is observed in the water column. The rocks and dead sea animals are partially covered with this material. Some organisms show signs of burns, probably from the caustic soda used to clean the fishmeal plants.

April 8, Fish continue to die. Now 30% of the scallops are gone. The waters again take on a light blue color.

April 9, Fish continue to die, 50% of the scallops are gone. The ocean water is extremely acidic.

April 10, 100% of the scallops are dead.

Most of the other sources give a similar picture of what occurred. Although some say that winds had shifted from the north and so much more of the water from the Pisco river found its way to the Paracas Bay than is normal. It could be that most of the damage was caused by the cleaning of the fishmeal plants with caustic soda and nitric acid. Apparently the mixture is to neutralize the caustic soda but it is not totally effective.

As David Lippeatt reported, Pluspetrol had stopped dredging in the Bay one and half days before the fishmeal plants started operations. Also ERM stopped its monitoring between April 5 and April 9"