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Tidings The Newsletter of the Friends of Perdido Bay

December 2020

Volume 33 Number 6

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www.friendsofperdidobay.com

Thank you for your support

I say this every newsletter because your support is vital to our continuing efforts to clean up our bay. Just as a example, your contributions and dues paid for a benthic study in 2018 which was critical to show how badly degraded the bottom of Perdido Bay was. Without this study, International Paper would right now have a permit to dump 8,000 to 16,000 pounds per day of solids (sludges) laden with dioxin and heavy metals into our bay for another 5 to 10 years. International Paper was supposed to do benthic sampling in Perdido Bay after they obtained a permit to go to the wetlands in 2010. I am sure they knew what they were going to find - a dead bottom. So instead of doing benthic sampling, IP studied the phytoplankton at five stations in Upper Perdido Bay. Even the results from those studies were not good. The phytoplankton showed poor diversity and were generally trash types (blue green algae) which do not support a healthy food chain. So without any opposing data to counter our data, IP could not apply for a permit. We were saved. Even though one of our commissioners tried to show how clean Perdido Bay was by drinking the water from the bay, our one small study prevailed.

Two years has passed and it is time to do another study. I had applied for a grant with the Pensacola Perdido Bay Estuarine Program. The total grant proposal was \$10,000 and it was for a one-time benthic sampling of four stations in Perdido Bay, two in the Upper Bay and two in the mid and lower Perdido Bay. **The grant was not funded.** This told me a lot about the priorities and politics of that program. This program is not too interested in finding out what the problems of our estuaries are. So Friends of Perdido Bay is going to do a benthic study anyway. In addition to just counting animals in the bottom at the two Upper Bay Stations, we are also going to do some chemical analyses of the bottom sediments. We are going to sample dioxins and heavy metals in the sediments and look for the toxic, un-ionized ammonia. This study is going to cost approximately \$10,000 and we are asking for **donations**. We are a 501(c) 3 organization which means you can deduct donations to Friends of Perdido Bay from your taxes. We will gladly send you a letter acknowledging your donation if it is over \$200. Since IP's permit has expired, even



though the Florida DEP claims it hasn't, we are hoping IP gets the message and will close. IP claims they take their environmental commitment seriously, I hope so.

A Nasty Surprise

After Hurricane Sally, I went down to my beach and found the same black oily goop, I had seen after Hurricane Ivan. As we did after Hurricane Ivan, I scooped some of this "goop" up and sent it off for dioxin and heavy metal analysis. And yes, there were plenty of dioxins and heavy metals in the sample which is now on my beach. Even though there was no 2,3,7,8 TCDD dioxin (this is the most toxic form), plenty of the other forms of dioxin were present. These may not be as toxic as the 2,3,7,8 TCDD, but these other forms of dioxin are toxic and can cause cancer. The EPA has rated the toxicity of these other forms of dioxin and given them a toxicity rating equivalent to the most toxic form, 2,3,7,8 TCDD. The goop which was washed onto my beach had a toxicity equivalent rating between **8.79 to 10.7 picograms/gram** 2,3,7,8 TCDD, The range depends on what method you use to find the toxicity equivalents. I consider these values high. Florida uses a equivalent dioxin target level of 7.0 picograms/gram to determine the soil cleanup level. NOAA uses a dioxin value of 3.6 picograms/gram to determine at what level these dioxins will have an effect. The level of dioxins I found on my beach are above the target soils cleanup level and the apparent effects level.

The source of this dioxin was either the bottom of Perdido Bay or the wetlands. We had so much rainfall during Sally that this goop could have washed off the wetlands. But the ultimate source is the solids IP is dumping into Perdido Bay - all 8,000 to 16,000 pounds per day (dry weight). And this is allowed by our environmental agencies. When I asked DEP how they could allow this level of dioxins to be dumped, they said that IP reports their effluent is "non-detect" for dioxin. IP is only required to test for the most toxic form of dioxin, 2,3,7,8 TCDD, and does not have to test for the other forms of dioxin. This oversight by the environmental agencies and IP is the result of heavy lobbying by the chemical industry. I am sure that IP realizes this, as do the environmental agencies. So IP takes its environmental commitments seriously!!! And our environmental agencies are protecting the environment and public health!!! It is a sham.

What is on the bottom of Perdido Bay? I suspect just the same things that wash onto our beaches after hurricanes. The good news is that the dioxin levels are less now than after Hurricane Ivan when they ran about 25 picograms/gram in the goop.

A Giant Coverup.

For years people have wondered what was on the bottom of Perdido Bay. Of course we knew what it looked like. We used to trawl for shrimp in the bay (we are no longer allowed to do this) and we would pull up black muck along with our few shrimp. We knew then it was a dumping ground for the sludges from the paper mill. It smelled like hydrogen sulfide and was probably toxic. The environmental agencies refer to this as "legacy pollution". But what was in it? The EPA began to study the sediments in the Gulf of Mexico in the 1980's. EPA was going to set environmental standards for sediments just like they had for water and for air. The EPA lab in Gulf Breeze Florida was one of the main research centers for establishing sediment guidelines and protocols. Sediment standards never happened. The research quietly died and standards were never set.

Politics was the reason. Many powerful industries which discharged large amounts of solids like the paper industry, didn't want anymore regulation. Many American industries were already moving off shore looking for cheap labor and less regulation. Nobody wanted to see America lose jobs but likewise no one wanted to see the environment ruined, especially those living at the end of the pipe. But sediment remained the focus of EPA until mid-2010's. Today the EPA lab in Gulf Breeze is focused on growth of populations and their effect on the environment.

In 1993, the EPA put out an early work titled "Draft Gulf of Mexico Toxic Substances and Pesticides Characterization Report". This report used data from the Gulf of Mexico Sediment Inventory (GMSI) which had been collected from 1980 to 1992. As the report states "Due to the paucity of physical, toxicity and tissue residue data, the evaluation of the GMSI is based entirely on measured chemical concentrations". Dioxin was not even one of the chemicals measured in those days. This report found that the top ten areas of concern based on the ranking system were: Perdido Bay, Tampa Bay, Galveston Bay, Escambia Bay, Choctawhatchee Bay.....Perdido Bay was #1 out of the 32 estuaries examined in the Gulf of Mexico for contamination in the sediments which would cause biological effects. The report documented the contaminate of greatest concern in the Perdido estuary as chrysene, a polyaromatic hydrocarbon which comes from pine trees. Chrysene is recalcitrant substance which is very slow to degrade and which the paper industry does not want to deal with. So you dump it. At this time dioxin was not even measured.

Like many "draft" reports put out by EPA, this report was never given official recognition and was buried. In the 1990's and into 2000's, EPA continued to do sediment analysis through a program called the e-map program. When the Pensacola Perdido Estuary Program began, I thought this data should be presented as it would be a starting point for what needed to be done to clean-up. I put through a "Freedom of Information Act" request to the EPA lab in Gulf Breeze. To my amazement, they told me it didn't exist. Then I heard it wasn't in suitable form to release as it was in some electronic data base. In short, EPA is sitting on this data and won't release it. In the meantime, sludges wash up on our beaches and you wonder what is in them. And the source of much of these sludges, the paper mill, continues to dump them at an astoundingly high rate. Our politicians won't help. They don't want to know and the public has to fund their own tests. This is the current state of environmental protection, protect your industries rather than the public. You pay for your own protection

The Consent Order Challenge.

The Consent Order, which was an agreement between International Paper and the Florida Department of Environmental Protection, was supposedly issued because of IP's exceedance of the chronic toxicity standard between 2012 and 2019. The Consent Order not only fined IP for these exceedance, but also was supposed to contain steps for IP to come into compliance with the toxicity standard. Beside the fines, IP was going to do several studies to determine what was causing the toxicity and then fix it. The supposed problem which IP was going to study was called salt ion imbalance study. The only problem with all of this salt ion imbalance was - IP had already done many studies from 2012 to 2019 and one of those studies clearly showed why IP's effluent was toxic. In

September 30, 2019, one of IP's consultants, AECOM, submitted a report called "Toxicity Control Plan Addendum: Assessment of Copper in Wastewater". The report said copper was not causing the toxicity but then the report went on to clearly show where the toxicity was coming from - it was coming from the solids or sludges. IP has never acknowledged that their sludges were toxic, maybe because they dump so much of them into Perdido Bay. To say you are dumping toxic wastes which you don't want to pay to dispose of, is hard. It is much cheaper to just let those wastes flow out.

In 2004 and 2005, when IP was going to convert their mill to brown linear board from 100% bleach and increase production, they hired a consultant to tell them what to expect. That consultant, Dr. Daigger, said that because they were going to increase production, the temperature of the effluent coming out of the plant was going to be higher. As a result, IP's solids would not settle well. In order to get their solids to settle, they would have to hold the effluent for at least 14 days and use a polymer. I am sure IP has done neither as this would add a lot to their cost of operating the mill. Matter of fact, they took one of their ponds out of operation and use it as a diversion pond incase of an upset. So the reason IP was having toxicity problems was because too much of their toxic solids were getting through the treatment system. The potential fix for the problem was to get rid of these solids. IP did like this fix. Instead IP wants to change their point of discharge where they no longer have to use 100% effluent in their toxicity tests. I am sure IP wants to get out of the wetlands and go back into Elevenmile Creek. There would be more dilution going into Lower Elevenmile Creek and they could get a mixing zone or a variance. They would no longer have to use 100% effluent in their tests, but some lower dilution of their effluent. This was the plan. It would also spell more disaster for Perdido Bay.

A Hearing was held on this Consent Order on Nov. 9, 2020. I was able to introduce this consultant report about copper and where the toxicity was actually coming from. I asked the DEP witness why DEP let the bogus plan for the ionic composition go through, if IP already knew what was causing the toxicity. She said it wasn't DEP job to find the source of toxicity in IP's effluent. The short and long tale is DEP does not provide enough oversight over these big companies. We will wait now to see what the judge does.

Membership and Renewals

Tidings is published six times a year by Friends of Perdido Bay and is mailed to members. To keep up with the latest news of happenings on Perdido Bay, become a member or renew your membership. For present members, your date for renewal is printed on your mailing label.

Membership is \$20.00 per **year per voting member**. To join or renew, fill out the coupon to the right and mail with your check to the address on the front.

Friends is a not-for-profit corporation and all contributions are tax-deductible. Funds received are all used for projects to improve Perdido Bay. No money is paid to the Board of Directors, all of whom volunteer their time and effort.

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