

**Petronila Creek Dissolved Solids TMDL  
Stakeholder Meeting Summary  
July 20, 2005  
Robstown, TX**

**STAKEHOLDER COMMITTEE PRESENT:**

Brandon Hall	Western Gulf Oil & Gas
David Reagan	Landowner
Eric Mendelman	Texas Watch
John Freeman	USDA – NRCS
Ken Faughn	Robstown Area Development Commission
Ken Kerrihard	Continental Resources, Inc.
Lawrence Mikulencak	Landowner
Leon Bernsen	Landowner
Lionel Lopez	South Texas Colonia Initiative
Roy Staiger	Texas Railroad Commission
Sandra Santos	Nueces County
Zandra Zuniga	Senator Hinojosa

**STAKEHOLDER COMMITTEE ABSENT:**

Beth Payne	Landowner
Edward Jungmann	Nueces County SWCD
Rocky Freund	Nueces River Authority
Harvey Buehring	Nueces County Extension Service

**SUPPORT TEAM PRESENT**

Kerry Niemann	Texas Commission on Environmental Quality
Alex Johnson	EA Engineering Science and Technology
Raed El-Farhan	The Louis Berger Group
Dr. Jeff Paine	UT Bureau of Economic Geology

**STAKEHOLDERS PRESENT**

Bill Renfro	Texas Railroad Commission
Emmett Hudson	TX Railroad Commission
Frank Salinas	American Ecology
Sinoel Contreras	Texas Commission on Environmental Quality
Pat Mikulencak	Landowner
Jose Daniel Garcia, Jr.	Western Gulf Oil & Gas

**WELCOME AND INTRODUCTIONS:**

Kerry Niemann, Project Manager with the TCEQ opened the fifth meeting explaining the purpose of the meeting was to summarize the last three years progress for the (total dissolved solids) TDS TMDL project, solicit comments and suggestions from the stakeholders, and present

modeling updates. Kerry's presentation was on the TCEQ TMDL Petronila Creek listing, a re-cap of the work that had been done on the Petronila Creek, and a summary of the data that has been collected.

A copy of the data presentation can be viewed at the following web page:

<http://www.tceq.state.tx.us/assets/public/implementation/water/tmdl/32-master2204dataresults.pdf>

**Dr. Jeff Paine:** The meeting was turned over to Jeff Paine with the Bureau of Economic Geology at the UT-Austin. Jeff presented an abbreviated version of the last meeting showing results from an airborne geophysical survey performed in January 2005 on Petronila Creek. The purpose for the Bureaus' involvement in the project was to delineate the extent of the desalinization problem in the Petronila area and try to make some interpretations about the mechanisms of the contamination. The presentation and results can be viewed at the following web site:

[http://www.tceq.state.tx.us/assets/public/implementation/water/tmdl/32-beg\\_slides\\_petronila\\_200507.pdf](http://www.tceq.state.tx.us/assets/public/implementation/water/tmdl/32-beg_slides_petronila_200507.pdf)

Question: Did you check any water wells around?

Answer: No, this is a shallow phenomenon and wells are deep.

Question: Is there any increase in salinity after a rainfall?

Answer: Within a day or so – there is a decrease due to dilution.

Question: How far into the Driscoll area – in miles?

Answer: Looking at the scale on the map, I am guessing around 10 miles.

**Dr. Raed El Farhan:** Raed EL-Farhan with the Louis Berger gave a brief re-cap of the TMDL process, steps, and listings on the 303(d) list. He then gave a presentation on the model and the draft TMDL.

Question: Is it a Federal mandate to do this TMDL?

Answer: Yes, it is a Federal mandate for every water body that is not meeting its' water quality standard based on the designated use.

Question: And that is the only thing you can do?

Answer: Yes, a TMDL.

Question: Do you know of any other waterways near Petronila Creek that are not meeting its' use?

Answer: Petronila Creek is the only one listed in this area for TDS.

Question: How about the Oso?

Answer: Oso is listed for a different criteria – bacteria and contact use. If you want to know all the waterbodies in the state we can get that for you.

Question: Do you have a web site?

Answer: Yes, [tceq.state.tx.us](http://tceq.state.tx.us)

Question: So most of the violations happen during low flow?

Answer: Yes, low flow.

Question: Are you talking about leaking brine pits and abandoned wells?

Answer: Yes, the law was changed back in 1969 and 1987 concerning the laws.

Question: Did you analyze the reduced flows?

Answer: Yes, that is on the way. We are doing that work now.

Question: Could I speak to that? Yes, go ahead. As I stated before, the brine pits that you are talking about are residuals and that is something that we will be looking at. But I am not sure that they supply that much of the load. The second thing is that a leaking well is a rarity. By that I mean, in order for a well to leak, the reservoir that it produces from, if it has not been plugged off, has to have enough pressure in it to raise the column of fluid to the groundwater depth. In this area, I don't know of any formations that have that pressure. In my opinion, these two items don't give off as much as you are giving to it in the model.

Answer: You are accurate.

Comment: You can tell by the differential in your pressure in the casing and your tubing if you have a leaking well.

Answer: The model is not even 1%.

Question: What is your sampling procedure for water in Petronila Creek?

Answer: Grab samples.

Question: A foot above the bed? What depth?

Answer: Just an in-stream water sample – not any particular depth, just a surface sample.

Question: Is there a plan to do some ??? sampling of the ground water quality of the shallow ground water?

Answer: That is probably an implementation question. During Eric Mendleman's presentation we can bring that up.

Question: Is the flow of water low enough that evaporation might be a contribution to the salinity?

Answer: Under low flow conditions – evaporation is.

Observation – If leaking oil and gas wells are all plugged, we are probably looking at decades before Petronila is clean.

Question: Can you explain to me what your existing load distribution is again? You are saying that 95% of chlorides come from leaking wells. Jeff says his studies don't show any evidence of that at all.

Answer: TCEQ recognizes that the terminology is incorrect. Raed's point is that when you lump it all together, historically, we agree it is a problem. Maybe we should call it "hot spots."

Question: Some Colonias are located on Petronila Creek. Those people had some goats and a horse that died. They believe they got out of their pen and drank some water from the creek and it made them sick and they died. I went over there and took some picture of that area of the creek. You can't even see the water – you only see lily pads. It is located Northwest of 77.

Answer: We do not have a reason to believe that TDS is a problem west of 77. Any correlation between the horse and the dog dying because of TDS has not been seen.

Question: Have you been there? Has anyone been there?

Answer: No, we have not had a reason to go west of 77. We have data that has not shown a problem there. That may be an issue for the TX Health Dept.

A copy of his presentation can be found at the following web site:

<http://www.tceq.state.tx.us/assets/public/implementation/water/tmdl/32-modelingpetronila2204july05slides.pdf>

The next speaker was **Eric Mendleman with Texas Watch**. There has been a great problem in Petronila Creek with illegal dumping. The creek is filled with cars, refrigerators, tires, and household trash. Eric said he would help coordinate the event, assist with funding, and partner with other groups to bring it to fruition. Eric's presentation can be viewed at the following web site:

<http://www.tceq.state.tx.us/assets/public/implementation/water/tmdl/32-texaswatchjuly05.pdf>

Eric proposed an education and outreach program for the Petronila area. Several other stakeholders shared information about other on-going programs. Discussion was held about the illegal dumping out in the rural areas and the possibility of signs and cameras to help monitor. Another suggestion was the need for a place for people in the county to dump legally.

Question: What do you do with the tires you collect?

Answer:

Kerry introduced **Bill Renfro with the Texas Railroad Commission**. Bill spoke briefly on \$700,000 that had been applied for under a non-point source §319 grant that will fund a project to address a portion of Petronila Creek in terms of salinity. Bill expanded on the project, location, and abatement practices for the remediation.

One citizen expressed his concern over a well on his property that was not "signed properly." Bill encouraged him to fill out a complaint with the TX Railroad Commission and encouraged him to follow through with the complaint through the district office.

Question: Is the grant specifically for this portion or others too?

Answer: Driscoll area

Question: Has the Railroad Commission ever caught anyone with 18-wheelers dumping waste out in the rural areas?

Answer: They have, in other places in the state, but I don't know about here in this area. Maybe call the Health Dept.

Reply: The Health Dept. is not the answer.

Previous meeting summaries, presentations and other data results and reports can be found at the following web site:

[http://www.tceq.state.tx.us/implementation/water/tmdl/32-petronila\\_group.html](http://www.tceq.state.tx.us/implementation/water/tmdl/32-petronila_group.html)

Kerry adjourned the meeting and said they would meet again in October.