

## **Brisbane Baylands CAG – December 2, 2008, Workshop**

**UPC: Steve Hanson  
Jason Lin  
Tom Graf – GrafCon**

**BBCAG: Clara Johnson, Chairperson  
Randy Breault  
Dana Dillworth  
Cris Hart  
Fran Martin  
Mae Swanbeck  
Mary Gutekanst**

\*This is a report from notes taken at the meeting. It is not a transcript. Nothing should be taken as an exact quote of any person.

Clara opened the workshop with a statement of purpose – to better understand the remediation and extent of contamination on the Schlage Lock and Southern Pacific properties.

Steve explained that they must answer fairly generally. Some things are not decided yet. The remediation plan is not approved yet and must go through the DTSC approval process. He introduced Tom Graf, who has enough experience in this area to tie it all together, and Jason Lin the UPC Director of Engineering.

Clara encouraged CAG members to write their questions down in order that Steve et al would provide some written answers. The intention is to have a 2<sup>nd</sup> meeting in April or May which will provide the opportunity to ask more specific questions.

Steve pointed out that they were still in negotiations with the City of Brisbane regarding property use and development and we won't be sure about some things until decisions and agreements are made.

Clara acknowledged that these are complex issues but that laymen such as the CAG needed to get some understanding of them.

Mae asked if they were going to be able to use the injection of biologicals. Tom replied that they were getting info from the pilots. He explained they were looking at 2 different techniques – ERD and ISCO – and said they were using them in two different kinds of locations. They are testing ISCO in high and low concentration areas and ERD in medium concentration areas.

Mae asked about results.

Tom stated we have initial results but not enough for a decision. The final results will be in the RAP. They likely will use a combination depending on the concentrations.

Steve pointed out that the goal is to break down toxics into safe chemicals.

Dana asked if that was hydrogen pyroxide.

Tom said no, it is hydrogen base though they are looking at using different techniques at different points.

Steve pointed out that the treatment would take 18 months North of Visitacion and 30 months south of Visitacion. He emphasized the importance of getting the Schlage Lock buildings down.

Dana asked about the toxics becoming Vinyl Chloride.

Tom said that a step in the process is vinyl chloride but that it also breaks down the vinyl chloride.

Dana asked if the same technique would be used in the Southern Pacific OU property.

Tom said yes there is a small area in OU2 but that some of it may be excavated as it is shallow in that area.

Steve explained that the difference is the Schlage Lock/Visitacion Valley groundwater is under pressure and it needs to be kept from spreading.

Clara asked if they would be turning the groundwater pumps back on.

Steve replied that it was not likely as it may interfere with the remediation.

Chris asked how many injection points they were going to use.

Tom said it would depend on the results of the pilots. Parameters need to be set and we won't know what those are until the end of the pilot testing.

Chris asked if this was part of the 18 month timeline.

Steve replied that it would be 30 months for it to be cleaned up to residential standards.

Mae asked when this timeline starts.

Steve said it would be when the buildings come down. They will probably get their demolition permit in February 2009.

Clara noted that when monitoring the movement of toxics often things that are unaccounted for are found. She asked if they know what's going on yet?

Tom explained that the data gaps are being studied with the pilot tests so we don't have the data yet. Brownfield Partners is doing that work.

Steve said there was lots of data out there so we will figure it out.

Clara asked how long it will continue to be checked.

Steve said there was a 30 year monitoring plan.

Clara asked about a situation at the landfill where there has been an uptick in one specific toxic. Did it come from Schlage?

Steve said that they have detailed plume maps over the years. It doesn't appear that anything has moved in that direction. The groundwater doesn't move over there.

Tom noted that they have had monitoring wells between OU and the landfill and nothing has appeared. The wells do go 40 feet deep.

Clara asked why the uptick happened then?

Tom said they could look into it. There is an upward gradient. Pressure is pushing groundwater up from Bay level in the landfill. There are artesian conditions at 40 feet down.

Chris said the landfill monitoring wells show radical changes through the years. What does that indicate?

Tom explained that the sample is from the big pond. Water moves slowly through the system, water picks up different stuff as it moves through. The fluctuation is normal given the conditions.

Mary asked about sampling methods and the results of the leachate. Why can't they sample what's coming out of the ground? The sampling methods seem convoluted.

Tom said to measure comparable threats they need to use the dilution. The seepage comes into a large body of water and any organisms exposed are exposed to the diluted amount.

Mary asked why the sampling points are in the lagoon.

Tom explained that since that is where the leachate comes out of the soil it is the dilution that determines the risk.

Dana asked about the measurement of groundwater movement in linear feet. What is the volume of peak flow?

Tom said it was about 12 gals./min. has been measured. But it is very little now because of no rain. When there are higher tides and rainfall it can go up to 12 ft./mi.

Mary pointed out that one of the charges of the CAG is to see if regulatory agencies are doing their job. Can we get the results of some of these tests and what is the dilution factor?

Tom said that there is no dilution in the report. Dilution is used to determine the risk factor.

Mary said that we are not sure what many parts of the report mean.

Tom thought they could give different headings to help understand each section. They should also write out abbreviations and other usage.

Clara pointed out that one problem is the difference between Not Detectable "at a certain level" versus a Not Reportable Level.

Tom explained that when the concentration is below a certain level they can't be sure what it means. These are laboratory ways of putting things.

Clara asked about the difference between Not Detectable and Detectable with no Reportable Level.

Tom explained that at some levels you can't with confidence say how much. It's there, but in such small quantities we can't say for certain how much.

Dana asked for clarification on some testing techniques. How do you draw samples?

Tom said there were many different ways of testing but there are consistent sampling protocols.

Mary returned to the dilution factor in the lagoon asking if some of the toxics are dropping out to the bottom of the lagoon. Is anybody going to check the levels at the bottom of the lagoon?

Steve commented that there's a lot of toxics in the Bay.

Both Mary and Clara expressed their concern about the sediments.

Clara had a concern about OU2 – a location on the report does not look accurate Steve explained that it was a schematic representation.

Dana asked about the levels found at 150 & 250 Industrial Way.

Tom said that there are petroleum hydrocarbons in the groundwater there. The Water Board is not worried about petroleum hydrocarbons in a residential area. Petroleum hydrocarbons are stable. Bacteria eats petroleum hydrocarbons.

Clara asked if that was true for all hydrocarbons.

Tom stated there is a difference between petroleum hydrocarbons and other hydrocarbons.

Clara expressed a concern about materials getting into the North Ditch.

Tom explained that the ditch problem was from the bunker. There was seepage from the bunker into the ditch – it was not from or to the groundwater.

Clara asked about the presence of Butyrol. Is there a concern about cumulative concentration because of the numbers of chemicals?

Tom discussed hydrocarbons stating that petroleum hydrocarbons are a distinct group. Aromatic Hydrocarbons are the actual toxics in petroleum – benaene, PAH's, tars. Petroleum hydrocarbons as a group are not particularly toxic – thy're more of a nuisance. PAH's are the real villains.

Clara pointed out that several borings have shown xylene, toluene, etc.

Tom explained that just because it exists doesn't mean it is at risk level. There are different levels that are screening levels. Then you have to determine site specific problems before you can determine if it is of concern.

Clara said that it doesn't make it easy.

Tom agreed that for a lay person it could be very confusing especially since there are naturally occurring levels.

Clara asked about arsenic.

Tom and Steve said yes, arsenic is a chemical of concern in OU1 and OU2.

Randy asked what prompted some of the results in the reports. They certainly aren't written for a lay person.

Tom offered that they could do a presentation on screening levels as a tool. I would be a good exercise. But at some point you still have to go to a toxicologist to determine amount of exposure, length of time, etc.

Clara acknowledged that screening levels may be low but wondered about the cumulative effects of so many different chemicals – even though individually their levels are low?

Dana pointed out that workers on Industrial way are being exposed to high levels of benzene. She asked when is it a problem in the groundwater and when is it a problem in the air?

Tom replied that there is an assumption that if it exists it must be a problem. But we have to consider at what level it becomes a problem. As benzene gets toward the soil level it gets eaten by bacteria faster than any other constituent. Just because something exists doesn't mean it's a risk.

Dana asked about the Stouffer building. Are they looking at what was used there? Where there acids?

Tom said they would look at that more carefully but the groundwater did have PAH levels checked.

Mary stated that she was trying to understand some of the terms used in the reports.

Tom said that he didn't know all of them but if CAG members would write down those they wanted to understand better they would try to get it to them in English.

Clara asked about K1 in OU2. She wanted to have results when they are available. There was some concern about underground storage tanks there. Why did the Santa Clara Health Department have MW1 destroyed.

Tom explained that the standard is if you are not actively using it it must be destroyed. The Water Board had said there was no further action needed there.

The meeting was adjourned as the time had been exceeded. Clara thanked the UPC representatives for their time and forthrightness in their answers. She also expressed hope that they could have a follow up meeting in April or May.