

From: Bruce Posthumus
To: John RICHARDS
Date: 9/7/98 7:01PM
Subject: Re: south bay power plant

I read your comments on the 9/3 working draft of the addendum. Thanks. My thoughts - some specific, some general - follow.

1. As far as I know (and unfortunately or fortunately), we do not have anything in writing that documents the specifics of our settlement agreement with SDG&E. (In contrast, recall Karen O'Haire's letter that more or less accurately documented the agreements that came out of the pre-hearing settlement conference.) I hate to admit it, but in the absence of such documentation, my recollection of exactly or entirely what was agreed upon is a bit hazy.
2. I think it is fair to say that whatever was agreed upon was based on certain facts, understandings, assumptions, and representations at the time of the agreements. Of course those understandings etc. were not documented either. Besides my not remembering exactly what was agreed upon, I think one of the reasons you are seeing things in the working draft addendum that either don't jive with or go beyond your recollection of our agreements with SDG&E is that my knowledge / understanding of some things has changed. I guess I want to write an addendum that is consistent with my current understandings, etc. In fact, knowing what I know now, I feel uncomfortable with some things that we may have agreed upon.
3. At the very least, I can't recommend adoption of an addendum that might set in stone (at least as long as the 1996 SBPP WDRs are in effect) something(s) that doesn't make sense or that it appears may later turn out to not make sense. In other words, even if this addendum reflects only and "exactly" the settlement agreement, I would hope there would be some way to come back at a later date (e.g. 6 months from now) and make additional changes pertinent to some of the same issues. I don't mind if SDG&E argues against those additional changes - but I don't want this addendum to do anything to legitimize their objections on grounds that further changes are contrary to the settlement agreement or NPDES/WDR rules unless SDG&E agrees to the changes. In other words, I want the argument to be about the appropriateness of the proposed requirements, not about whether changes can be made without SDG&E's blessing. FWIW, the "final" chlorine limit doesn't go into effect until 12/15/99, so there is still time to make changes in chlorine monitoring requirements before that date.
4. My understanding of some things pertinent to various issues is neither stagnant nor complete. In other words, I realize some things now that I didn't realize before, but I am not to the point where I am satisfied that I can adequately explain or document certain things that may be important to supporting some of the changes I think are or may be appropriate. For example, I would like to have a better understanding of the low level amperometric titration method of analyzing for chlorine. I would also like to have a better understanding of the availability, limitations, and costs of continuously recording chlorine analyzers. I would also like to have a better understanding of Minimum Levels (MLs) and/or other reporting level approaches used or contemplated by regulatory agencies. In other words, some of the changes I think are appropriate may be a bit premature. The reason I'm fussing with them in this addendum is to try to avoid creating loopholes, especially since I am concerned that this will be the last chance, at least until its time to reissue the WDRs.
5. During our discussions with SDG&E re: using their PQL for chlorine, I assumed SDG&E was using the most sensitive (or the only) standard analytical method for chlorine. As it turns out, there are several analytical methods for chlorine, and, based on my recent reading of Standard Methods and a conversation with Bill Ray (the SRWCB QA/QC person) it appears the low level amperometric titration method produces

reliable results at much lower concentrations. Silly me. What was I thinking? I should have realized that there is no incentive for SDG&E to use a more sensitive analytical method which would actually produce reliable measurements at levels at or nearer the concentration limits. Such a method might actually reveal noncompliance! If you use a yard stick, you conveniently can't measure those small fractions of an inch (even if it's a good yardstick).... Insensitive analytical methods can nullify numerical limits intended to protect sensitive critters....

My understanding of "what got us into this pickle" is NOT "our reliance on MDLs as an alternative compliance threshold." The pickle is simply a consequence of calculated limits which are lower than PQLs and/or MDLs. The questions which then arise have to do with how to determine compliance when analytical results are below the PQL and or the MDL. How should such results be handled for purposes of determining compliance with limits based on means or averages? For purposes of determining compliance with limits based on single sample results? The SWRCB attempted to deal with this in the '90 Ocean Plan. The SWRCB and USEPA apparently are still grappling with this. (See SWRCB '97 draft CTR implementation policy and SWRCB '98 Ocean Plan triennial review staff report re: "reporting levels." There appears to be movement away from PQLs and MDLs towards Minimum Levels.) The SBPP WDRs attempted to deal with it in Provisions E.21-23. The 9/4 working draft of the addendum takes a different approach, but tries to avoid throwing the baby out with the bath water.

You mentioned wanting to see reasons to justify reliance on SDG&E's chlorine PQLs. The reasons I recall that seemed persuasive when we were talking with SDG&E were (a) there were no published chlorine PQLs; (b) (I think) SDG&E claimed they did better than most other labs. Reason (a) may be true. I don't know about reason (b). The persuasiveness of both reasons was based on my assumption that the analytical method SDG&E was using was the best available. Neither reason seems to me to be very persuasive if there is a better method. I do not recall any commitment of SDG&E to "do its good faith best to get the lowest PQLs of which its lab is capable." My understanding is simply that they want to use the value(s) specified in the 10/97 monitoring report for as long as the order is in effect. That, combined with their other proposed changes re: compliance determination (which I don't recall agreeing to) would enable them to be in compliance (but only on a technicality, so to speak) and have no obligation to use a better analytical method or attempt to improve their analytical performance. That doesn't make sense to me. FWIW, I think the agreement we reached under Karen O'Haire's oversight was simply to use published PQLs. By the way, it is not just a matter of not knowing of a SATISFACTORY published PQL for chlorine in seawater. I don't know of ANY published PQL for chlorine in saltwater.... I hasten to add that I am no PQL expert.

You also asked why we require monitoring that doesn't tell us anything meaningful, given that SDG&E's PQLs are not low enough to enable determination of compliance with the limits in the order. I think monitoring for any parameter which has a limit is useful and meaningful (and, I think, required by NPDES regs, in the case of effluent limits), even if it doesn't enable measurement of concentrations as low as the limit is set. Unfortunately, such monitoring is not AS useful or meaningful as we would like. But, it at least tells us if the concentrations are at or above a PQL which is higher than the limit. In other words, it tells us if there are any huge violations.

You inquired whether there were other chemical constituents with effluent limits. There are no final combined discharge numerical effluent limits for anything besides chlorine, acute toxicity, pH, and temperature. The only final in-plant waste discharge numerical effluent limits are on total suspended solids and oil & grease.

6. One of the changes made by Addendum 2 had to do with chlorine monitoring requirements. The more I think about those requirements, the more inadequate they seem to me to be. Here is a pollutant that the SDG&E intentionally puts into cooling water several times daily for purposes killing marine organisms yet monitoring is required only twice a month, during one chlorination cycle, when the SDG&E thinks the concentrations are likely to be highest, by means of grab samples. The chlorine limit is based on the

duration of the uninterrupted chlorine discharge, which SDG&E told us (albeit, without any supporting data that I am aware of) would be identical to the duration of the chlorine injection periods. In our discussions with SDG&E, we were told that each unit was chlorinated for 20 minutes at a time, so, with 4 units, the duration of uninterrupted chlorine discharge would be 80 minutes. But review of SDG&E's monitoring reports indicates the reported duration of uninterrupted chlorine discharge is 20 minutes. So how long are the uninterrupted chlorine discharges, really? And how do chlorine concentrations vary over time? And when do peak chlorine concentrations occur? And how long do peak chlorine concentrations last? And how close in time are those twice monthly measurements to the times of peak chlorine concentrations? If only there were continuous chlorine analyzer/recorders....

It turns out that there are. In fact, SDRWQCB monitoring programs for WDRs for Padre Dam MWD and Rho CA Water District require their use. As best as I've been able to determine so far, it appears that they are available for less than \$5000 and can measure fairly low concentrations. Although they might not be suitable for determining whether the concentration meets the effluent limit, they might at least enable determination of the duration of uninterrupted chlorine discharge. They also offer the hope of providing a much better "moving" picture of the nature of chlorine discharges from SBPP (rather than simply infrequent snapshots). The monitoring currently required doesn't tell us much of anything. Really bad monitoring requirements can nullify really good waste discharge requirements....

8. My question about the certification language was not intended to suggest that such language be retained. My question had to do with how to go about deleting or revising that language. It definitely does not warrant a big squabble. The 9/4 draft left that matter up in the air, but I think I can draft something that will take care of the concerns of all parties.(!!?!!)

The 9/4 working draft addendum I sent you this morning was significantly different and more refined than the 9/3 draft you reviewed and commented on. Although I think it did a better job of addressing some of the sticky issues, I don't know if it does anything to alleviate your concerns.

>>> John RICHARDS 09/04/98 04:44PM >>>

Are we getting any closer to having this out the door? I'm not sure. There seem to be some comments here that call into question the agreement that I thought we'd reached w/ SDG&E. I had no trouble opening your file in WP. I have saved my comments to a new file (attached) in WP 5.2 format. No secret password needed! Please review my suggestions (I've made it to p. 10 so far - will carry on after I send this off) and get back to me as quickly as you can.

CC: coea, mccam, Peteg, richp