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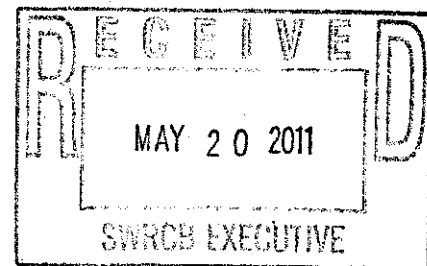
Counsel & Manager:
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May 20, 2011

Via E-Mail commentletters@waterboards.ca.gov

State Water Resources Control Board
1001 I Street, 2nd Floor
Sacramento, CA 95814

Re: Comment Letter – Delta Methylmercury TMDL



Dear Board Members:

On behalf of the South Delta Water Agency, I am submitting the following comments to the Methylmercury ("MeHg") TMDL and Basin Plan Amendment developed and adopted by the Regional Board. Our agency has been involved in the process since it began and has given input when necessary.

The Regional Board staff originally presented an initial draft TMDL approximately three years ago. At the public hearings on that draft, many stakeholders objected to the proposed TMDL. This resulted in the Regional Board directing staff to reconsider its recommendations through a stakeholder process. That process has played out over the two years, resulting in the adoption of the subject TMDL and Basin Plan Amendment by the Regional Board. Although there are some differences between the original draft and this final version, they are not substantive.

Although staff has been diligent (and competent) throughout the stakeholder process, and many parties participated, the final products do not address the issues raised when the earlier draft was criticized over two years ago. Instead, the stakeholder process appeared to have two main foci, one being an attempt to get the stakeholders to work together to comply with the TMDL, and the other to convince the stakeholders that the originally proposed TMDL was indeed the best way to address the MeHg problem. From this I conclude the stakeholder process accomplished very little and would caution the Board to take pause when considering any future stakeholder process.

The problems I previously identified remain unchanged in the current TMDL. The Responses to Comments by the Regional Board staff clearly do not address the issues I raised. The underlying cause of this appears to stem from the Regional Board and SWRCB's adoptions of the Strategic Plans which focused on in-Delta issues.¹ Such an approach would only be justified or effective if in-Delta activities were indeed the cause of the particular problem being addressed. When in-Delta activities are not the cause, we end up with expensive, time consuming efforts which achieve little or nothing while the underlying problem remains.

The TMDL/Basin Plan Amendment (hereinafter "TMDL") itself provides the proof of this. The TMDL lists the inputs of MeHg to the Delta. Those inputs include: Tributaries at 8.2 g/day; Wetlands at 2.7 g/day; Urban runoff at 0.05 g/day; Municipal WWTP's at 0.6 g/day; Open Water at 2.4 g/day; Atmospheric Deposition at 0.06 g/day; and Ag Return flows at 0.3 g/day (page iv). This makes in-Delta Ag Return flows approximately 2% of the MeHg input. Tributaries and Open Water contribute approximately 74%. This is specifically confirmed in the TMDL wherein it states "As noted . . . tributary inputs to the Delta are the largest sources of methyl mercury and total mercury." (page 16). The Response to Comments muddles this point by noting that "agricultural sources contribute from 1% up to 35.8% *of the sum of the methylmercury loads in each subarea . . .*" (Emphasis added). You will note I commented that agricultural lands purportedly contribute 2% of the methylmercury in the Delta and staff answered by stating those lands contribute from 1-35.8% *of the loads of each area*. Hence the staff did not address the question of why any actions are needed to address this (near) smallest contributor of MeHg. Staff statements are misleading as well as non-responsive

To address this problem, the TMDL program starts in the Delta, and (eventually) requires load reductions. For example, the San Joaquin River subarea (which includes generally the area of the southern Delta) has a goal of reducing its current Ag Return flow (estimated) MeHg load of 23 g/year (note this is a *yearly* contribution, whereas the above referenced amounts were *per day* contributions) down to 8.3 g/year; a reduction of approximately 64%.

The other in-Delta ag is to reduce their contributions to load in varying amounts of 0%, 0%, 45%, 65%, 80%, and 82% 18%.

These reductions by the contributors (purportedly 2% of the problem) would be required *before* there is any obligation that the tributary and open water contributions to MeHg load (74%

¹ This focus on in-Delta activities is a direct result of the undue influence of export interests including the SWP and CVP. Those parties have inexplicably convinced the Regional Board and the SWRCB that the current Delta problems are a result of "other factors" including in-Delta diversions, contaminants, etc., rather than the yearly violations of DWR and USBR permits, lack of necessary CESA take permits, and failure of the SWRCB require such compliance.

of the problem) be reduced. Put another way, the staff recommend that we attempt to reduce some in-Delta agriculture MeHg production by as much as 82% of 2% of the total MeHg in the Delta while not trying to reduce that which contributes 74% of the total MeHg! A 5% decrease of that 74% would decrease in-Delta MeHg by 3.7% rather than the 1%+ decrease sought from ag. I apologize if these numbers are confusing, but why would one focus one's efforts to reduce the smallest contributor and not the larger contributors?

There can be, and is not, any reasonable basis for approaching a problem by trying to control 2% of it and not 74%. No explanation (and certainly no Response to Comments) can change the illogical and ineffective manner by which the MeHg problem is being addressed. Even if the in-Delta agricultural interests can somehow find a way to reduce their alleged contribution to total load by half, that would result in a 1% reduction in MeHg in the Delta. Again, there can be no justification for initially trying to make a 1% reduction.²

The TMDL program therefore seeks to impel the landowners of the 500,000+ acres of agricultural lands in the Delta to spend money on investigations and reports (and be limited in other actions and activities) with a best case scenario that it leads to a decrease in MeHg in the Delta by 1%. This, while the largest contributions of MeHg in the area remain unaddressed, and under no mandatory obligations. Such a situation cannot be justified.

It does not matter that "we have to start somewhere" or "we have decided to move from downstream to upstream" (itself an illogical approach to pollution), or that the TMDL begins with investigations and more studies and not immediate requirements for reductions. If one desires to address the MeHg problem, one can only start with the largest part of the problem, not the most insignificant. Surely it would be more effective, as well as more fair if the upstream contributors were required to fund the initial studies and investigations rather than burden those who contribute the smallest amount.

The process is even more remarkable in that the assumed contributions from southern Delta agricultural return flows are likely incorrect, and *overstated*.

The TMDL cites a recent study of in-Delta ag return flows, and from that data calculates the contributions of agriculture. "The study results indicated . . . mineral soils had a lower net methylmercury loads than . . . (Delta ag lands) dominated by organic soils." (Page 104). The southern Delta is to a very large degree dominated by those mineral soils, with much less peat (organic soils). This means that calculations from the study data should result in less calculated contribution from the southern Delta than the central Delta, and the TMDL *may* be saying that. However, because other factors suggest the central Delta is a MeHg sump, the central Delta

² I realize that this initial TMDL effort includes wetland contributions, but there is little doubt in my mind that the Board will not restrict the ability of wetlands to function.

agricultural interests will not be required to decrease MeHg production (on their lands which produce more MeHg) while the southern Delta agriculture interests will have to reduce their MeHg production by 64%.

It should be noted that the agricultural return flow study cited in the TMDL sampled/tested drains on Empire Tract, Lower Jones Tract, Staten Island, Twitchell Island, and Upper Jones Tract. I believe those islands are well below sea level and largely made of peat soils. None of them are similar to the majority of lands within the southern Delta. It is doubtful that any calculation about MeHg loading based on this study would accurately reflect conditions and MeHg production in our area.

Further, I am unaware of any process occurring during normal agricultural irrigation and drainage practices in our area which would methylize mercury. Channel water is diverted, applied to the land, that which is not taken up by the crop either enters a drainage ditch or enters the ground water, and the drainage water is pumped back into the Delta. It may be possible that subsurface processes methylize mercury, but those are not controllable by farmers. The Responses to Comments state some studies show that intermittent wetlands produce more MeHg than other wetlands, and thus periodically wetted agricultural fields (irrigation) might also function similarly. Again, the Response miss the point. If the irrigated in-Delta lands contribute only 2% of the problem it is irrelevant that irrigated in-Delta lands might be producing more MeHg than un-irrigated in-Delta lands.

In the southern Delta, artificially salty water enters from the San Joaquin River. This salt is a result of the CVP (in conjunction with the SWP) delivering 500,000 - 800,000 tons of salt a year to the valley, and 300,000 - 500,000 tons of this salt draining into the River and then the Delta. Because of this salt (at high concentrations) local farmers must apply a certain amount of additional water for leaching purposes in an attempt to control salt in the root zone. This problem is complicated by the shallow ground water which is directly connected to the channel water, such that the ground water rises and drops with the tides. This process makes the leaching of salts difficult, while the export projects inhibit the flushing of the channels by altering net flows.

The point of this is to explain that local farmers have few if any options regarding their irrigation practices. This means that there are likely no best management practices ("BMP's") which could address MeHg without adversely affecting the necessary leaching of the root zones. The approach taken by the TMDL suggests that those who may be 2% of the problem should consider practices that hinder crop production. Although we may find we can do some things, it is unrealistic to base future load reductions on BMP's unknown at this time.

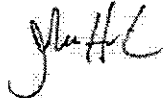
I appreciate the opportunity to comment. I'm sure you understand our position given the above. We believe the better approach would be an analysis to determine if the problem is in large part of function of the historic mercury in the system, which is slowly flowing out to the Bay and ocean. If MeHg production from that source is the main contributor to in-Delta loads,

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we might then conclude the problem rests with the State as a whole, rather than with a small group of stakeholders. Clearly, the problem will not be solved by trying to cut in half that which produces 2% of the MeHg. Any sort of cost/benefit analysis would quickly indicate there is no point in forcing in-Delta agricultural interest to spend money and time on research.

Each of the above comments were previously and timely raised with the Regional Board and its staff. As explained above the specific Responses to these issues in n way addressed or answered them. Please feel free to contact me if you have any questions.

Very truly yours,



JOHN HERRICK