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**To:** [Pulupa\\_Patrick@Waterboards](mailto:Pulupa_Patrick@Waterboards)  
**Subject:** 24 June 2015 Email Sent By James K. Dowdall Concerning Valley Water Management Company And CDO Comments  
**Date:** Tuesday, June 30, 2015 3:02:46 PM

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Dear Mr. Pulupa:

This a two part response concerning the upcoming meeting to be held 30,31 July 2015 in Rancho Cordova regarding the Cease and Desist Order (CDO) proposed for Valley Water Management Company (VWM). Part 1 is an addendum to my 24 June 2015 email. Part 2 are questions about the proposed CDO that I have that need to be clearly answered prior to the board meeting.

### **PART 1 (ADDENDUM)**

Since the proposed CDO for the VWM sites in the Edison area, Kern County could set a precedent on the future of oil field operations and discharges in the State of California, the moratorium I called for "on all future tentative orders affecting oil producers who discharge to impoundments (i.e., sumps or ponds) in Kern County until they have had sufficient time to provide their input" should be expanded to include all oil producing counties in the state. This is to ensure that all oil companies, both big and small, are all regulated in a reasonable manner concerning their operations ability to impact water quality. They are all the stake holders that need to be heard.

The areas of discharging produced oil field wastewater to surface impoundments in California are diverse, where there will have to necessarily be sets of rules or regulations for areas where such discharges have a very little or no probability of affecting groundwater as opposed to areas where such discharges have a very high probability of negatively affecting groundwater. For example, VWM has several facilities in the Midway Sunset Oil Field that the Water Board adopted non-Title 27 orders since there is no useable groundwater in the oil field that VWM could impact. There are several other areas on the west side where the surface disposal of oil field wastewater can be safely accomplished.

Also, there are areas on the east side where such discharges can be safely performed, especially when the produced water is relatively fresh

(below the Basin Plan limits such as E & B Natural Resources) or where the best management practices of spray fields using evapotranspiration is used in an arid climate on salt tolerant vegetation. The Musco Olive Facility outside of Tracy has used this process for years without negatively impacting any groundwater off-site (i.e., recent personal communication with Dennis Leikam of Musco Olive) as demonstrated by current and historic groundwater monitoring data.

No further action should be taken by the Water Board until they have heard from all concerned oil companies that will be regulated in the future who have a stake in how you intend to regulate them. They should all be sent letters and given a chance to decide if they want to form a coalition with a spokesperson representing them (i.e., probably all the smaller independents) or, participate in the regulatory process, providing expert input as the regulatory process is developed (i.e., major oil companies). My proposal would apply to all oil producers in the state (i.e., with the other regional water board offices being involved in the process as well).

The regulatory process should not be set in stone before all the facts are in. That would be nonsensical. The regulatory process can only reasonably and logically be developed after scientific facts are gathered and have been carefully reviewed. To blindly regulate based upon potential fears or speculation regarding impacts to water quality would be dangerous and reckless. Use reason and discretion as the California Water Code calls upon you to do.

Also, to say that VWM is causing an imminent threat to groundwater quality when not one complaint from any well owners in the vicinity has ever been filed with the water board for 60 years is absurd. The regional water board at the 30,31 July 2015 meeting to be held in Rancho Cordova has to clearly demonstrate that an imminent threat exists. If they cannot do this, then the order cannot be adopted by any reasonable person.

In addition, VWM discharges of produced water to Edison Race Track provide a beneficial use to the environment. As an employee of the water board, I witnessed ducks and other water fowl using the water at Edison Race Track for survival. I also witnessed how green the vegetation was from the wastewater being applied. I argue that VMM is being a good steward to the environment, especially during this horrific drought, because

they are appropriately discharging produced oil field water to the surface and helping the plants and the animals to survive without negatively impacting water quality. In 15 years of inspections, I never saw any oil covered animal or plant or dead bird or anything like it. As a matter of fact, I saw a healthy environment in a pristine setting.

I've seen VWM operations throughout the years and can vouch that they are a good and reliable company who do care deeply about the environment. They are benefiting the global environment by employing people, keeping oil companies operating who can safely discharge their produced oil field wastewater as a necessary by-product of producing oil, and providing oil field products that we all need to have a strong economy.

I have had 36 years of experience working in the oil industry, especially concerning discharges of oil field wastewater to surface impoundments, among other things. I could be called upon as an expert witness at the upcoming water board meeting, should I decide to appear, to give testimony as to how VWM has operated their facilities in the Edison Oil Field in compliance with the regulations and the Central Valley Water Board Orders.

## **PART 2 (CDO COMMENTS)**

1) In Finding No. 8, were any complaints ever received from any one of the owners of the 36 groundwater supply wells being allegedly polluted (allegations made by the Regional Water Quality Control Board Fresno office) by VWM operations?

2) Finding No.17 is not specific enough. What was the groundwater from these wells used for? Why wasn't the current status of these wells confirmed by regional board staff in the field? Were the wells decommissioned, are they idle, or are they still being pumped? If they were being pumped, what was the volume of the groundwater being pumped? Did these wells have an accurate flow meter?

3) Finding No. 19 is historically inaccurate. Fee 34 is a wastewater transfer facility where wastewater from the Edison Oil Field is initially received and ultimately sent to Race Track Hill. Freeboard was always inspected for the shipping pond, where floatation devices controlled the

freeboard level to keep in compliance with the 2 foot freeboard requirement. The Basin Plan limits were not historically applied to the transfer facility since it was a dynamic system for transferring wastewater and not storing it. In addition, what does insufficient freeboard mean for the two ponds cited for Race Track Hill? Without a measuring tape, could you specify how close to the top of the pond the wastewater was? Was there an outlet gravity drainage pipe gravity flowing the wastewater to the next adjacent downstream pond? If so, how much capacity did this pond have? Was there ever any real danger of an uncontrolled overflow?

4) Regarding Finding No. 20, I am aware of the report cited. This report was reviewed in detail by Rajeev Dwivedi, who had an extensive working file that he personally showed and discussed with me when I was working at the regional board Fresno office. He had a complete response prepared to address the report but management at the board did not want to proceed forward at the time. In other words, the ball was left in the regional board office court and VWM was never given a response. I recall Rajeev's draft response was that VWM was not significantly impacting groundwater. I remember reviewing this report sometime later and came to a similar conclusion but never prepared a response as I knew management at the board would never have acted upon it. Therefore, I was instructed to perform the required annual inspections at the facilities for basic compliance with the orders. In view of the perception that I stated in No. 3 above, I basically never found VWM in violation. In my professional judgment of VWM's operations, it was evident to me that there was no imminent threat to water quality and that the facilities were being operated in a sound manner by experienced personnel in compliance with the orders.

5) Finding No. 21 is nonsense. In view of the fact that no complaints have ever been received (an assumption I can make since none were mentioned in the proposed order) then I can deduce that a condition of pollution to the groundwater has never been caused and is not likely to be caused by the present operation. The two entry ponds mentioned are directly piped to the shipping pond, which has always been operated within the required limits. The inexperienced regional board staff inspecting these facilities simply do not understand the VWM setup and are calling their typical operations that have been done for years violations. I should know, since I performed numerous inspections at these facilities and saw no

violations or nuisances or anything else that threatened human health, the environment or groundwater with beneficial uses.

6) Finding No. 27 is a speculation. What kind of major storm, a possible maximum precipitation (PMP) event or what?

7) For Finding No. 28, what was the basis for the Section 13267 order. The Water Board hadn't even ever formally responded to the VWM report submitted years ago. Did the Water Board do an in-house report with geologic and hydrogeologic interpretations to demonstrate that a Section 13267 order is required? VWM petitioned to the State Water Resources Control Board. What was their determination. Shouldn't it be stated in this finding?

8) For Finding No. 30, why are not any of the monitoring wells and boring locations shown on any of the attachments?

9) For Finding No. 31, whose conclusions are these? Could it be that the mound under Race Track Hill is simply an asymmetric wastewater mound and not groundwater, flowing by gravity drainage down dip to the southwest? At a five degree dip, how far would that be below Fee 34?

Seepage rates are mentioned for Fee 34. Was any wastewater mound found at the water table under Fee 34? If so, why was it not mentioned in the finding?

10) The statement in Finding No. 32 is premature and may simply be a wastewater mound perched on top of clay layers.

11) Finding No. 33 gives me no information at all. Why are these wells not shown on a map? Is the water beneath Race Track Hill wastewater or groundwater? What does immediately to the southwest mean, 50 feet away, a 100 feet away or what? Where are these water supply wells screened? What is the depth of the regional water table? Is the wastewater mound perched under Race Track Hill in hydraulic communication to the screened intervals in these supply wells? Were any pump tests performed? Give me some useful information!

12) Finding No. 34 is way off base. As a best management practice

(BMP) operating a spray field in the Race Track Hill area is the best way to ensure groundwater will never be significantly impacted due to the low rainfall and high evaporation rates. By the way, why weren't any of these climatological facts put into the proposed order? To not allow spraying will put a higher hydraulic head on the ponds at Race Track Hill. Your order to stop the spray field actually causes a greater threat to water quality than the VWM current operations, thus violating your own regulations!

13) For Finding No. 35, why not state your general intentions for the anticipated General Waste Discharge Requirements (WDRs) at the 30,31 July 2015 meeting? That way, VWM can anticipate whether they can comply with the future WDRs or go bankrupt.

14) Finding No. 36 is not a reasonable statement! To bankrupt people and leave them essentially homeless without work based upon a need to investigate a potential threat without first having specific hydrogeologic facts in my opinion would be a criminal abuse of the California Water Code. I think you will find that many individuals, probably including some attorneys, hold the same position.

15) How can the statements in Finding No. 37 possibly be valid if there have been no reports of pollution to groundwater from VWM operations for nearly 60 years! Can you show me on a map your projection of the size of this phantom plume? One thing appears to be certain. No one who operates any wells in the vicinity of the VWM operations has ever complained of pollution from their operations. Where is the imminent threat that you speculate exist?

You state boldly that "Based on the nature and possible consequences of the discharges, including the contamination of surface or groundwater, or impacts to groundwater recharge areas, the burden of the required tasks, including the costs, bears a reasonable relationship to the need for the tasks and reports, and the benefits to be obtained from the tasks and information." Let's expand upon this.

How much has it cost VWM so far to do the investigations they have recently conducted? I want to know the exact costs. What do you estimate will be the ultimate cost of completing their investigations? Where is this all leading to, an academic study and flexing of your

muscles because you are the "invincible" state? What benefits are being gained from this charade? Present evidence shows that no one has lost any groundwater producing well due to VWM operations. Second, what future benefits are being gained from any continued investigations when no impacts to wells near the facility have ever been documented? If they have, present the data at the meeting to be held in Ranch Cordova and convince me and all the others that may show up that will be directly affected by this CDO. It seems as though you intentionally want to put several oil operators in the Edison Oil Field out of business!

16) At the end of Finding No. 38 you state that "CEQA review at this time would be premature and speculative, as there is simply not enough information concerning Valley Water's proposed remedial activities and possible associated environmental impacts."

You are publicly admitting that things are premature and speculative and that not enough information is available. Then, how can you possibly take this CDO before the Water Board for adoption? When enough information is available, Kern County should conduct the CEQA process which could result in a negative declaration. In this case, could a CDO be legally adopted without Kern County's CEQA input? If there is not enough information available to even complete the CEQA process, what is the basis for the proposed CDO?

17) In Finding No. 39 it is stated: "As a result of the events and activities described in this Order, the Central Valley Water Board finds that a discharge of waste in violation of the Basin Plan has polluted groundwater." Question: Where has the groundwater been polluted? At the public meeting show the regional water table and that the wastewater mound is in direct hydraulic communication and directly perched on it. I want to see the cross-sections, subsurface geology, hydrogeology and stratigraphic correlations that can convince me in public as a Professional Geologist that what you are saying is not a speculation but the ground truth. I don't want to see cartoons. What I want to see is boring log information, including geophysical logs with subsurface stratigraphic correlations, and groundwater depth and geochemical data clearly illustrated on the cross-sections. I want to be absolutely convinced in public at the meeting, that VWM has polluted the groundwater! That is what you state. You need to demonstrate it in public.

18) Isn't the statement in Finding No. 42 negligent? I may not be the Discharger or an affected person but, I am a member of the public. As a member of the public and an interested person, I have the right to speak at the public meeting and question evidence submitted by the Water Board (questions submitted before the 30 June 2015 5:00 p.m. deadline in this email). Also, what about the City of Bakersfield and the Kern County Water Agency? Have you contacted them about the Proposed CDO? Who have you talked to, what is their titles, and what was their response? State it in Finding No. 42! This is precisely why this public hearing must be conducted in at least the City of Bakersfield to allow all interested persons affected a chance to participate. Several individuals have already requested this, including Senator Jean Fuller.

19) Regarding the elimination of the spray fields as specified in Discharge Specification No. 1 by 15 August 2015, your proposed specification will immediately cause a greater risk to impacting groundwater quality based upon the higher hydraulic head that will be put on the ponds at Race Track Hill by eliminating a BMP. Will the state pay for the cleanup of the potential imminent impact to water quality that they may create? Or will VWM be responsible for the inept requirements of the proposed CDO?

20) Concerning discharge Specification No. 4, (a) is illegal since the CDO is not a Title 27 order. How can you legally apply Title 27 to VWM unless they are under a Title 27 order? Regarding (c), what if the well owners do not allow access? VWM cannot force their way in without breaking the law and trespassing. How can you force well owners to comply with this CDO? Since you are the state, why don't you collect the groundwater samples you think are necessary? Put your money where your CDO is! Contribute to some of the cost if you believe so passionately in your cause. The state has contracts with analytical labs and has money to spend to obtain water samples. Why not use the money? Regarding (e), what cleanup, what corrective action? Why all the threats? This is absolutely ridiculous and by the way illegal! If you take this route, you will have to necessarily have bring a Title 27 order before the Water Board for adoption. Without enough information to complete a CEQA process, how can you possibly do that? Regarding (f), VWM is already using a BMP that you want to eliminate.

Where in the world does anyone ever read the Tulare Lake Basin Plan (BP), revised Second Edition or the revised California Water Code? I always did. I also read the rational for the regulations (Title 23 & Title 27) to know what the purpose and spirit of the regulations were. To blindly ignore the revised BP and the California Water Code is both illegal and illogical and I can prove it.

The revised BP states that: "Discharges of oil field wastewater that exceed the above maximum salinity limits may be permitted to unlined sumps, stream channels, or surface waters if the discharger successfully demonstrates to the Regional Water Board in a public hearing that the proposed discharge will not substantially affect water quality nor cause a violation of water quality objectives." This is what VWM has done in the past with the issuance of orders at public hearings. Nothing has changed. They complied with the orders. They are not in violation of the BP.

Section 13241 of the California Water Code states: "Each regional board shall establish such water quality objectives in the water quality control plan as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. Factors to be considered by a regional board in establishing water quality objectives shall include, but not necessarily be limited to, all of the following:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrogeologic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water."

More information and time is needed to comply with the Water Code. The Water Board has only considered a portion of what is required by the Water Board. All six factors have to be addressed, particularly (c), (d), and

(f). But as stated, the discharger is not necessarily limited to these factors.

Concerning (a), there has been no lose of any beneficial uses that has been demonstrated by the water board. The water board needs to develop a report as described below to address (b). To address (c), time will be needed to consider all the factors involved so that a reasonable decision can be made which include an alternative method disposal (injection wells when available for permitting) or water treatment. The economic considerations in (d) are perhaps the most important as many operators will lose their primary source of income and go bankrupt. To address (e), the water needs to coordinate its efforts with the City of Bakersfield Planning Department. To address (f), a discharger must be given time to economically consider water treatment and blending options as well as using spray fields as a BMP to reduce any potential threat to water quality and at the same time benefit the environment.

21) Regarding Discharge Specification No. 5 (a), it is already know before even doing anything that wastewater has percolated some distance into the unsaturated zone. That is the purpose of oil field evaporation/percolation ponds. Regarding (c) contained in the proposed specification, water board staff needs to perform the sampling and come up with their own independent interpretation of the results signed by a professional geologist, certified engineering geologist, and/or a registered engineer that currently works for the state, any one of which is registered in the State of California. The interpretation should be submitted as a report, with all supporting geologic and hydrogeologic facts and data before proceedings forward with any future required phases of work specified in the proposed CDO. This CDO is open ended and appears to require limitless phases of investigation up until VWM goes bankrupt.

22) The intention of Discharge Specification No. 9 is stated after the word "or" in the bottom half of the specification. It is my contention that you intend to shut their surface disposal operations down and I call upon you to openly state this at the upcoming meeting. From the first half of the specification, it is obviously your intention is to make an order that VWM cannot possibility comply with so that they will have to close. You don't even need this. If this proposed CDO is adopted by the Water Board, it will shut down their operation and many oil producers in the Edison Oil Field. This is explicitly why the proposed CDO should not be adopted any time

soon until sufficient facts are available and until VWM and the affected stake holders have had a sufficient and reasonable amount of time to respond.

23) Regarding Discharge Specification No. 10, the state should share an equal cost in any replacement water supply well or required water treatment. After all, the Water Board has allowed this discharge for nearly 60 years. This specification is so far ahead of the cart I think the horse must be in a different universe!

Final statement: Slow down, get the facts, and proceed with caution. You have a long way to go before attempting to take an order like this to the water board. VWM has always complied with the water board when it came to conducting investigations. They are a cooperative company and do not need a threatening CDO and time schedule to comply with the BP and California Water Code. If you insist on still taking this to the 30,31 July 2015 meeting in Rancho Cordova, see you there. There will be a lot of heat in the kitchen!

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